APPENDIX A

IN THE UNITED STATES COURT OF APPEALS
FOR THE ELEVENTH CIRCUIT

[Filed Aug. 24, 2001]

No. 99-11638

UNITED STATES OF AMERICA,
Plaintiff-Appellee,

versus

CHRISTIAN A. HANSEN, ALFRED R. TAYLOR, *et al.*,
Defendants-Appellants.

Appeals from the United States District Court
for the Southern District of Georgia
D.C. Docket No. 98-00023-CR-2-1

Before BIRCH and DUBINA, *Circuit Judges*, and HANCOCK*, *District Judge.*

PER CURIAM:

Alfred R. Taylor, Christian A. Hansen, and Randall W. Hansen appeal their convictions for conspiracy to commit environmental crimes, violating the Clean Water Act, violating the Resource Conservation and Recovery Act, and violating the Comprehensive Environmental Response, Compensation, and Liability Act. On appeal, they each assert several alleged trial and sentencing errors. Finding no merit to their claims, we AFFIRM.

---

* Honorable James H. Hancock, U.S. District Judge for the Northern District of Alabama, sitting by designation.

I. BACKGROUND

Christian Hansen ("Hansen") founded the Hanlin Group ("Hanlin") in 1972, and served as its President, Chief Executive Officer, and Chairman of the Board until early April 1993. R19-160. Hanlin operated an industrial plant in Brunswick, Georgia, as LCP Chemicals-Georgia ("LCP"), R21-41, and Hansen served as the plant manager for approximately two months in 1993. R19-166-67. Randall Hansen ("Randall"), Hansen's son, was hired as an executive vice president in 1992. R21-193. He became Chief Executive Officer in April 1993 and served in that capacity until November 1993. R21-195. Alfred Taylor ("Taylor") began working for LCP in 1979, and became the Brunswick operations manager in 1991. R21-243-44. He served as plant manager from February until July 1993. R21-244-45.

Hanlin purchased the Brunswick plant in 1979.[1] R21-41. The plant, which is on a site adjacent to tidal marshes and Purvis Creek, operated continuously year-round, manufacturing caustic soda, hydrogen gas, hydrochloric acid, and chlor-alkali bleach. About 150 people worked at the plant in two "cell buildings" or "cellrooms." Each cellroom was about the size of a football field and contained fifty mercury "cells," the units used to produce the bleach, soda, gas, and acid ultimately sold by LCP. R8-200-2. "The production process generated hazardous wastes, including elemental mercury,

---

[1] The site has been used by various companies for 50 years, and was unregulated by any environmental regulations until the 1970s. The site was operated as an oil refinery from 1919 to 1937 by Atlantic Richfield [ARCO], as a manufacturing site from 1937 to 1955 by Dixie Paint Company, and as a chlor-alkali facility from 1955 to 1979 by Allied Chemical. R16-85-86. Allied Chemical used graphite anodes impregnated with PCBs during the chlor-alkali process, and buried the contaminated anodes on the site. R21-54, 229. It is now a Superfund site, and is being cleaned at the expense of the government and these earlier owners.

mercury-contaminated sludge (or "muds"),[2] wastewater, chlorine contaminated wastewater, and extremely caustic wastes with high pH values." *Id.* at 2-3; R16-112-14. The wastes were subject to various environmental regulations, including wastewater limitations on pH, mercury, and chlorine set forth in LCP's National Pollutant Discharge Elimination System ("NPDES"), and to regulations of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6928(d)(2).

LCP constructed a wastewater treatment system in 1989 and 1990, and was allowed, by NPDES permit, to discharge the treated wastewater into Purvis Creek. Although LCP represented that the system would have a continuous treatment capacity of 70 gallons per minute in the project description submitted to the Georgia EPD, Govt. Ex. 10-3b at SW5 00001807, the filtration and storage systems installed had a capacity of only 35 gallons per minute, R20-20-21; Govt. Ex. 1-12. LCP did not notify the Georgia EPD of the

---

[2] In a memorandum regarding mercury consumption, dated 4 October 1993, Taylor noted that mercury "[c]onsumption was particularly high in 1988" and for 1990-1993. Govt. Ex. 19-5. An attachment showed "excess" mercury from consumption of 243,102 pounds from 1986 to 1993. *Id.*

The "mud" was spread onto the cellroom floors to dry, the mercury was recovered from underneath and on top of the mud, and the mud was put into drums for disposal. R19-190-93. When the wastewater covered the floors, the mud could not be stored until the water receded and it was dried. *Id.* at 191. The drums were stored underneath the cellrooms. R20-62. The drums were labeled and dated when the mud was first put into the drum "because [the plant] only had a ninety-day storage period under [the] permit." *Id.* at 62-63. There were "times" when the mud was "redrumed" and again labeled for another ninety-days. *Id.* Hanson testified that Taylor was aware of the muds in the drums. *Id.* at 62.

At Taylor's direction, mud that accumulated in the wastewater stored in tank railcars was "drained off to the wastewater treatment area." R20-356-57.

lower wastewater treatment capacity. R20-290. The plant was authorized to store wastewater which was awaiting treatment in the wastewater treatment plant on the floor of the cellrooms. R16-118; R21-145, 161. The cellrooms were constructed of concrete, with a downward slope which diverted the wastewaters to a sump[3] and then to the wastewater treatment holding tanks. R19-33-34. If the cellroom became incapable of holding the wastewater, it leaked out onto the ground and accumulated in a lake. R16-131-32. LCP also used "Bunker C" oil tanks for additional wastewater storage. R19-291; R20-42-45. Due to accidental spills, bleach sometimes accumulated on the Cellroom 1 floor. R19-258. During the early 1990s, the maintenance at the plant began deteriorating. R20- 177, 179. Replacement parts were not made available, and wastewater began accumulating around the plant. *Id.*

The operations were subject to Occupational Safety and Health Administration ("OSHA") regulations for the protection and safety of the employees. The workers exposed to mercury vapors in the mercury cell process were provided with liquids to drink in order to stay hydrated and deplete the mercury, and their exposure was periodically monitored through an extensive mercury urinalysis procedure. R20-145-46; R21-251-52. Employees who showed exposure to excess mercury were not allowed to return to work until they were seen by a medical physician, and were then relocated to other plant locations away from the mercury cells.[4] R20-146, 164-65, 168-69, 174; R21-255, 258; R22-12, 24.

---

[3] A sump is a hole with a grate over it. R19-34

[4] LCP retested and counseled any employee who tested above 150 micrograms per liter, and employees with a confirmed result above 250 micrograms were removed from further exposure until their level went below 150. R21-253-55.

In August 1992, OSHA inspected the plant "due to an employee complaint about safety hazards associated with water on cell room floors." Govt. Ex. l0-7i. OSHA found this to be a "willful violation and demanded that no employees be allowed to work in contact with the water while the equipment was energized," and "forced" LCP "to erect a boardwalk system above the water level around all the equipment until the water c[ould] be eliminated permanently." *Id.* LCP added wooden elevated walkways in the cellrooms to prevent the workers from having contact with the water on the floor and to reduce the workers' risk of electrical shock or chemical burns.[5] R16-118; R21-145-46, 161. The chemicals used in LCP's operations were very alkaline and caustic and could irritate and burn skin.[6] R16-93; R19-43, 197; R20-188; R21-263-64. To minimize the workers' risk of skin irritations and burns, LCP held routine safety meetings, encouraged and received safety inspections, and provided the employees with training, protective

---

[5] The water occasionally rose high enough to splash onto or soak the walkways, and they became slick. R20-181, 322. OSHA also required that LCP utilize a lockout procedure for employees to work on a cell or pump because of the potential electrical hazards. R19-45; R20-190. In the lockout procedure, an operator ensured that the electrical power was shut off before a mechanic was permitted to begin work. R19-46-47; R20-190, 323.

[6] One former employee, Duane Lorenzo Carver, testified that he received second and third degree burns on his thighs from caustic that had soaked through his clothes. R19-182, 197. In reference to a question regarding the conditions of the cellrooms in 1993, he said that, while digging out the sump, he misstepped and fell into the sump hole, which was filled with wastewater, "about chest deep." R19-201-03, 227-228. Carver said that he showered immediately and suffered minor burns on his stomach and legs. R19-203, 229. Carver was unable to recall the exact date, and admitted the accident could have occurred any time between 1987 and 1993. R19-226. Carver testified that, although the employees were told to report all accidents to management, he did not report the accident, and thus did not receive any medical attention. R19-230.

equipment to preclude skin contact, and first aid stations and showers to relieve inadvertent contact. R19-47, 194, 233-34, 246, 300-01; R20-170, 181-82, 185, 188, 190-91; R21-249. All employees, including those assigned to the cellrooms, were authorized to work elsewhere in the plant if they were concerned about their safety. R19-302; R20-186-87, 320-2; R21-156.

In 1991, LCP' s parent corporation, Hanlin, filed a voluntary bankruptcy petition with pre-petition obligations exceeding $100 million. R19-119; R21-194. Shortly thereafter, Randall was hired as an executive vice president of LCP and charged with "developing the business and financial plans necessary to turn around the financial condition of the chemical business." [7] R21-193; R16-97. Randall worked closely with Hanlin's bankruptcy attorneys, the law firm of McCarter and English, and the environmental law firm of Decher, Price and Rhoads. R19-140-43; R21-194, 215.[8] Randall also worked closely with LCP's corporate environmental manager and site environmental managers. R20-64-65; R21-210, 215. During the bankruptcy proceedings, available funds for maintenance, repair, and environmental compliance were restricted. R19-50-52. Randall attempted to find additional funds by selling excess equipment and reducing the payroll but the funds remained limited. *Id.* The ultimate decision-making for all major projects, capital and extraordinary expenditures, and the sale of assets, were subject to the approval of the Board and the bankruptcy creditor's committee and court. R19-121, 143-47, 174-75; R21-196. Although funds were requested to address the cellrooms' wastewater problem, the funds were usualiy not released. R21-259-60.

---

[7] Randall Hansen had worked for Hanlin in a financial capacity from 1986 until 1989.

[8] During the bankruptcy proceedings, Hanlin set aside seven to ten thousand dollars per day for professional fees. R19-147.

In February 1992, the Brunswick plant manager, James L. Johns, advised Randall in writing that, without "extensive work," to keep the wastewater treatment system operable, they would be unable to "operate the plan for more than a few days without 'willfully' violating EPD regulations which we will not do." Govt. Ex. 1-8a at HA 00024857.[9] In April 1992, Randall visited the Brunswick plant and met with plant manager James L. Johns for "an update on regulatory compliance requirements." Govt Ex. 10-7b. He indicated that he would provide guidance on the approval of funds for a study for the NPDES permit, LCP's commitment regarding the 1 June 1992 Georgia EPD deadline for cellroom floor repairs, and the possibility of a study or remediation plan for the "brine impoundments." *Id.* In June 1992, Randall was advised in writing that a conference with OSHA on 8 May 1992 noted 26 serious violations and 11 non-serious violations. Govt. Ex. 10-7d.

During the summer of 1992, the Brunswick plant management changed.[10] R16-104-05. In August 1992, Taylor advised Randall that Brunswick was "unable to meet current permit limitations," that he anticipated "more restrictive" limitations, and that the "[p]erformance of the

---

[9] The memo was addressed "Production Reliability" and noted that "[l]ack of money has limited the plant production capability and imposed substantial risk on maintaining acceptable production levels." Govt. Ex. 1-8a at HA 00024856. The wastewater treatment issues were one of nine noted problems. *Id.*, HA 00024856 and 57.

[10] J.L. Johns, the plant manager at the beginning of 1992, retired due to heart problems. R16-104. During the six month search to replace Johns, Hugh Croom, the plant manager for the LCP chlor-alkali plant in North Carolina, transferred to Brunswick and acted as plant manager. *Id.* at 103-05. Croom returned to the North Carolina plant in January 1993, and admitted that problems with the wastewater treatment plant and his concerns for maintaining a production rate and for the safety of the employees and the community contributed to his desire to leave Brunswick. R16-134-36.

waste water treatment system [was] a serious threat to the continued operation of the plant." Govt. Ex. 1-12. Taylor said that while the "generation of waste water ha[d] greatly increased due to leaking brine tanks, [poor condition of the] brine pumps [and] . . . brine filters, heavy rainfall, the necessity to destroy bleach, and numerous operating problems," at the same time the capacity of the wastewater system was limited by the reduced capacity of the filtration and storage systems, was "further reduced" by the "[l]ack of maintenance," and the system was "frequently shut down due to mechanical problems and operator errors." *Id.* In November 1992, Randall visited the Brunswick plant to interview a candidate for plant manager, and spoke with the acting manager, Hugh Croom. R19-30. At that time, Croom advised Randall of problems with the caustic filters and the intentional dumping of caustic on the cellroom floors by some unknown employee. R19-30-31, 56-58. Croom testified that Randall "was just as concerned as we were about the problems" and authorized Croom to hire a task force.[11] R19-50, 58.

In February 1993, LCP offered the plant manager job to Taylor. R21-244. During his tenure as manager, Taylor stressed safety and strict adherence with LCP's training and safety programs, and assured employees the right to refuse to perform any activity if the employee felt it to be unsafe. R19-302-03. When the wastewater overran the cellroom berms and streamed outside the building, the overflow was reported to the EPD and to the LCP Board by letters signed by Taylor. R20-25-27. The amounts reported in the letters were consistent with the data that the plant had at that time. R20-27.

---

[11] The dumping abated once the task force was hired and the valve area was monitored. R19-58.

During the spring of 1993, Taylor attended a company meeting with Randall and Croom in which they discussed the condition of the Brunswick plant and possible solutions. R19-18-19. Taylor and Croom recommended "either shutting the plant down or shutting it down long enough to salvage one cellroom and rebuild the second cellroom, and then starting back up with just one cellroom." R19-20, 22. Taylor worked up "the figures and costs" and submitted it to Randall, but Randall later advised them that "[t]hey won't let me do it." R19-22-23, 64. By letters to EPD, Taylor reported that the plant had exceeded the maximum daily allowable discharges seventeen times, and explained that the discharges were due to "heavy rainfall," "miscommunication between operations supervision," "a slight miscalculation," and "storm, rainfall and process leaks." Govt. Ex. 10-ld, e, g. Taylor noted that the "waste water treatment operating efficiency and outfall discharge" was "positive[ly] affect[ed]" by LCP's decision not to replace a leaking brine tank. Govt. Ex. 10-1g.

In April 1993, the Board of Directors, with the approval of the bankruptcy court, removed Hansen as Chairman, President, and CEO of Hanlin after he attempted to expel the outside directors from the board. R19-122-23, 160, 167-68. The Board and the bankruptcy creditors' committee asked Randall to serve as LCP's interim CEO and Chief Operating Officer [COO]. R19-160; R21-195, 200. His primary focus was financial and, with the support of the bankruptcy creditors committee and court, he sought to sell the company to a responsible party who could operate the business and have the financial resources to deal with the various environmental conditions. R19-147-48, 164, 174-75; R21-200-01, 219. In this capacity, Randall received daily reports concerning the Brunswick plant's operations and problems. R16-97-98. After Hansen's removal as CEO, he was no longer a corporate officer and became a director and

employee. R19-136, 160, 168. Sometime later, the Board sent Hansen to Brunswick to help run the plant. R19-166-67.

Taylor reported five discharge violations in April, and indicated that two violations were due to a problem in the wastewater treatment system that had been corrected, one violation was attributable to rainfall, and one violation was due to leaks which had been repaired. Govt. Ex. 10-1h. Taylor indicated that "[a]n upset in the wastewater treatment system caused a release of ineffectively treated wastewater" but that "the discharge was rerouted until the system resumed normal operation." *Id.* Taylor reported 16 discharge deviations in May 1993, which he indicated were caused by an equipment failure which had been repaired, "overloading the wastewater treatment system," and rainfall. Govt. Ex. 10-li. In June, Taylor reported 21 excessive discharges which were attributable to "upsets" and "operational problems" in the wastewater treatment system and equipment failures. Govt. Ex. 10-lj and 10-1k. Hansen visited the plant in late June and began working with Taylor. R19-167.

In July 1993, Taylor resigned as plant manager. R21-245. Upon Taylor's resignation, Hansen assumed the running of the plant and served as plant manger from July through September 1993. R19-24, 167; R20-354. Taylor subsequently returned to the plant as a full time employee as a process or project engineer on the condition that he not have to "assume managerial type duties." R21-246. He remained involved in environmental issues, however, and in October 1993, questioned the assistant production manager regarding the loss of mercury. R20-325, 337-38.

The Georgia Environmental Protection Division notified LCP in writing in June 1993 that it proposed revoking the NPDES permit to discharge treated wastewater in Purvis Creek based on "continuous violations . . . since May 1992 of pH, total residual chlorine, and mercury." Govt. Ex. 13-1d at 1. It explained that, although it had provided LCP "Notice

of Violation" letters twice in 1992 and had requested that LCP "take all necessary measures to come into compliance," "these violations have continued" and "significant noncompliance" was documented in 10 out of 13 months from May 1992 through May 1993. *Id.* The notification summarized that there had been "no progress . . . in upgrading the plant or its operation" since the noncompliance had begun to be a serious problem. *Id.* at 2; R20-274-276. Randall submitted formal written comments on the revocation stating that "LCP has already taken steps to improve the situation by installing additional filter capacity, repairing or replacing equipment and reducing the load on the system" and referring to a 23 July plan addressing future corrective measures. Govt. Ex. 10-6 at 4.

In July and August 1993, Hansen directed the plant employees to begin pumping the wastes into the large "bunker" tanks that had once been used to store oil although he knew that the wastewater mixed with oil could not be run through the wastewater treatment system. R20-48, 183, 328-29, 350. The plant environmental/safety manager reported the use of the tanks to Randall in July. Govt. Ex. 10-7x. After the EPD moved to revoke the plant's permit, Hansen advised the employees to "increase the flow on the wastewater treatment system to a level that was to keep the water from running out the [cellroom] door" and into the lake. R20-358-59. During their respective terms as plant manager, Hansen and Taylor were advised of and observed "water [] flow[ing] out the back door of the cellroom" as a result of a break in the cellroom berms, and "overflow[ing] on the ground." R20-327-28, 335-36, 341. The employees complained to Hansen, Taylor, and Randall about "the water condition, the deterioration of the plant with the pipes, the leaks, and the safety equipment," and, despite assurances that conditions would improve "[a]s soon as [the plant] g[o]t some money," the plant did not get "any money" and conditions did not change. R21-146-50.

The NPDES permit was revoked on 23 September 1993. R20-275. LCP filed an appeal which stayed the revocation. R20-275. Although EPD sought a temporary restraining order, it was denied by the state court judge.[12] R20-302-03.

During this same period of time, Allied Signal and HoltraChem indicated interest as buyers, and a financial agreement was worked out in which Allied Signal would provide needed money, personnel, and raw materials or maintenance parts for the plant, including an extra wastewater treatment facility. R9-228, Exs. A & B; R19-149-51; R20-18, 80. As a part of the financial agreement, Allied Signal loaned employee Mark White to LCP to serve as plant manager in October 1993.[13] R19-152-53; R20-18. With the influx of Allied Signal's resources, conditions at the plant improved. R20-80. The purchase agreement eventually fell through and shortly thereafter the facility closed. After the plant closed, Randall, through the bankruptcy counsel, requested $1,500,000 in additional funds from the bankruptcy court to deal with the environmental im[illegible]t of closing but the request was denied. R9-228, Ex. [illegible]t 2, 7, Feb. 8, 1994, letter from M. Patrick M. Nuciarone.

The Georgia EPD turned the closed plant over to the U.S. Environmental Protection Agency (EPA) for cleanup and EPA estimate that the cleanup will cost more than $50

---

[12] By letter, the bankruptcy creditors' committee advised the state judge of the bankruptcy proceedings and "the likely consequences that would result from any closing of the Brunswick plant." R9-228, Ex. B at 1. The committee represented that "even if actual production at [the plant] was to cease, Hanlin would have an obligation to continue to spend considerable amounts of money at [the] plant in order to avoid the possibility of an environmental catastrophe." *Id.* at 2. A possible environmental impact of shutting the plant down included "additional mercury leakage." R20-147; R19-83-84.

[13] White continued at the plant as manager until the plant closed. R20-18.

million. R20-380; R21-57. Taylor, as one of the ten LCP employees approved by the EPA to participate in the site cleanup, assisted in the decommissioning of the cellrooms and ran the water treatment plant built by the EPA. R21-55-56. The cleanup was paid for by the government and Hanlin's predecessors at the site: Allied Signal (successor to Allied Chemical), ARCO, and Georgia-Power Company. R21-39-40.

The government indicted Christian Hansen, Randall Hansen, Douglas Brent Hanson, and Alfred R. Taylor for conspiracy to commit environmental crimes at the site between 1 July 1985, and 1 February 1994, 18 U.S.C. § 371, (Count 1), and various substantive crimes.[14] R1-1-1. The charges included: violating the Clean Water Act ("CWA"), 33 U.S.C. § 1319(c)(2)(A) and 18 U.S.C. § 2, by exceeding the NPDES permit between June 1993 and January 1994 (Counts 2-21); violating the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §§ 6928(d)(2)(A) and (e), and 8 U.S.C. § 2, by storing wastewater on the cellroom floor and permitting some to escape into the environment between 29 May 1993 and 1 February 1994 (Counts 22-32), storing wastewater in the Bunker "C" tanks between 23 July 1993 and 1 February 1994 (Count 33), and knowingly endangering employees by exposing them to impermissibly stored wastes and wastewaters between 29 May 1993 and 1 February 1994 (Count 34); violating the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9603(b)(3), by failing to notify the U.S. government of unpermitted releases of chlorine or wastewater into the environment between 21 July and 23 October 1993 (Counts 35-41); and violating the Endangered Species Act, 16 U.S.C. § 1538(a)(l)(B), 1538(g), and

[14] Two other plant employees, Duane Outhwaite and Christopher Dunn, were charged separately and entered into plea agreements. R8-200-7 n. 5.

1540(b)(1), by taking an endangered species, a Wood Stork, as a result of discharging mercury into the marsh, Purvis Creek, and the Turtle River (Count 42). R1 -1. Hansen was charged with Counts 1-42, Randall was charged with Counts 1-34 and 42, Hanson was charged with Counts 1-6, 10-22, 24, 26-32, and 34-42, and Taylor was charged with Counts 1-32, and 34-42. *Id.* Hanson, the former environmental and health and safety LCP manager, pled guilty to a CERCLA offense (Count 41) and the offense under the Endangered Species Act (Count 42) and testified against Hansen, Randall, and Taylor.[15] R3-83; R20-6. At the conclusion of the defendants' case, the district judge granted their motion for acquittal as to Count 42 but denied the motion as to all other charges. R6-123. Hansen was convicted of all counts, Randall was convicted of all charged counts, and Taylor was convicted of Counts 1-3, 10-11, 22-26, 29-32, 34-35, and 38-41. R22-214-15. Their renewed motions for acquittal and motions for judgment notwithstanding the verdict and/or for a new trial were denied. R7-145, 146, 153-54, 163; R8-200.

Hansen was sentenced to 108 months of imprisonment, a fine of $20,000, a special assessment of $2,050, and two years of supervised release. R8-214. Randall was sentenced to 46 months of imprisonment, a fine of $20,000, a special assessment of $1,700, and two years of supervised release. R9-236. Taylor was sentenced to 78 months of imprisonment, a special assessment of $1,000, and two years of supervised release. R8-215. Each defendant appealed, and was allowed to remain on bond pending appeal. R8-219, 221; R19-226, 238-40.

On appeal, Hansen raises four issues: (1) the district court erred in admitting the government's expert witness testimony; (2) the district court's instructions misstated the reasonable

---

[15] Hanson was sentenced to eighteen months of imprisonment, and one year of supervised release on each count, concurrent. R8-123.

doubt standard, improperly applied the concept of reasonable corporate officer, improperly defined the elements of knowing endangerment, and effectively eliminated the mens rea requirement from each statutory violation; (3) the evidence was insufficient to support his convictions; and (4) the district court erred in concluding that it lacked the authority to depart from the applicable sentencing guidelines. Randall argues that: (1) district court erred by not granting his motion for judgment of acquittal because the evidence was insufficient to support his conviction for knowing endangerment under the RCRA and the government never proved causation on counts 2-33; (2) the district court's instructions were erroneous on the elements of the charged substantive offenses and on the responsible corporate officer instruction as an alternative basis for criminal liability; (3) the district court erroneously admitted high prejudicially and irrelevant evidence; and (4) the district court erred by declining to depart downward. Taylor maintains that the district court erred: (1) by not granting his motion for judgment of acquittal and for a new trial based on insufficiency of the evidence; (2) in its instruction concerning the wastewater treatment system; and (3) in sentencing him.

II. DISCUSSION

A. *Admission of Expert Witness Testimony*

Hansen argues that the district court erred in admitting testimony from government expert witness Daniel Teitelbaum because the government failed to disclose Teitelbaum's checkered history of credibility and the court failed to conduct a hearing regarding the testimony. Hansen also maintains that the district court erred in admitting the testimony of Teitelbaum and government expert witness Christopher Reh because the testimony was unreliable, irrelevant, and highly prejudicial. The government responds that Hansen waived the arguments regarding Teitelbaum's testimony by failing to object to the testimony at trial.

The week before trial, Hansen moved for a *Daubert*[16] hearing and to exclude the testimony of expert witnesses regarding certain allegedly scientific conclusions and exhibits. R4-94-95; R6-110-1. Noting that the motion was directed to the expert testimony regarding the effect of high mercury levels on endangered species as charged in Count 42, the district court denied it, finding that the motion did "not identif[y] the source, the substance, or most importantly the underlying methodology of this testimony" and that, therefore, there was "no underlying methodology or reasoning for the court to assess." R6-110-1-2, 4.

During the trial, Teitelbaum confirmed that he had previously testified as an expert witness, and explained that "it has been a regular portion of [his] practice over the years."[17] R20-230-31. Hansen neither objected nor examined Teitelbaum after the government moved to tender Teitelbaum as an expert, and the court directed that the jury consider him an expert in his field. *Id.* at 232.

Teitelbaum testified regarding the plant employees' potential exposure to hazardous substances. Based on his review of "the large number of biological samples," "many interviews," the "documents concerning the health and

---

[16] *Daubert v. Merrell Dow Pharm. Inc.*, 509 U.S. 579, 113 S. Ct. 2786 (1993). In *Daubert*, the Court held that, when "[f]aced with a proffer of expert scientific testimony, . . . the trial judge must determine. . . whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue." *Id.* at 592 113 S. Ct. at 2796.

[17] On cross-examination, Teitelbaum stated that this was the first time that he had testified as "a consultant for the U.S. Attorney," but explained that he had testified "for OSHA many times," "for the Department of Justice a number of times," and for "the EPA." R20-255-56. He was asked whether he considered the government to be a "pretty good customer" for his services, and responded that he did not "take any money from the government" for consulting services. *Id.* at 256.

hygiene program," and other documents, he found "a substantial amount of spillage of sodium hydroxide," "numerous chlorine leaks," and spills and leaks of hydrochloric acid at the plant. R20-233-35; *see also* 248-49. He noted that, because the sodium hydroxide spillage had a very high pH and was quite caustic, contact with the spillage could cause a first- to third-degree burn, or even be lethal. *Id.* at 233-34. Teitelbaum explained that exposure to the chlorine leaks could cause "severe injuries to eyes, upper airways, and lungs, and, under some circumstances, death." *Id.* at 234. He commented that hydrochloric acid was a "classic poison" which would also cause burns and potential death. *Id.* at 234-35. Based on the biological samples, he concluded that the employees were in danger of death or serious bodily injury." *Id.* at 244-45, 248. Finally, Teitelbaum noted that the data showed the mercury levels in the workers' urine were "between two and five times the acceptable level of excretion, based on the World Health Organization or the NIOSH recommendations." *Id.* at 244-45. No objections were raised to his testimony. *Id.* at 232-63.

At sentencing, the probation officer noted that he had "discredit[ed]" one of Hansen's witnesses "because he was not even at the LCP Plant" and "did not have firsthand knowledge to see this." R13-26. Hansen's attorney responded that, based on the probation officer's theory, Teitelbaum's testimony should also be discounted "because he never went to the plant before it was shut down." *Id.* at 28. The district judge commented that Teitelbaum "made a very credible witness. I think the best witness that the Government had." *Id.* at 29.

We review for abuse of discretion both the district court's decisions regarding the admission of expert testimony and reliability of an expert, *Kuhmo Tire Co. Ltd. v. Carmichael*, 526 U.S. 137, 152, 119 S. Ct. 1167, 1176 (1989), and the denial of a *Daubert* hearing, *United States v. Nichols*, 169

F.3d 1255, 1263 (10th Cir. 1999). "Absent an objection, we can review the challenged evidence only for plain error. *Christopher v. Cutter Labs.*, 53 F.3d 1184, 1192 (11th Cir. 1995).

Scientific expert testimony is admissible if "(1) the expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue." *City of Tuscaloosa v. Harcros Chems, Inc.*, 158 F.3d 548, 562 (11th Cir. 1998). In *Daubert*, the Supreme Court suggested a flexible inquiry regarding the methodology considering such factors as "whether it can be (and has been) tested," whether it "has been subjected to peer review and publication,'' the known or potential rate of error, "the existence and maintenance of standards controlling the technique's operation, and the degree it is accepted as reliable within the relevant scientific community." 509 U.S. at 591, 593-94, 113 S. Ct. at 2795-96. *Daubert* hearings are not required, but may be helpful in "complicated cases involving multiple expert witnesses." *City of Tuscaloosa*, 158 F.3d at 564-65 n. 21. A district court should conduct a *Daubert* inquiry when the opposing party's motion for a hearing is supported by "conflicting medical literature and expert testimony." *Tanner v. Westbrook*, 174 F.3d 542, 546 (5th Cir. 1999). Consistent with *Daubert*, the evidence must be scientifically related to the disputed facts at issue in the case. *Allison v. McGhan Med. Corp.*, 184 F. 3d 1300, 1312 (11th Cir. 1999).

Hansen's motion for a *Daubert* hearing was neither addressed to the charges to which Teitelbaum testified, or his testimony in general, nor supported by the source, substance, or methodology of the challenged testimony. Hansen failed

to object to either Teitelbaum's qualification as an expert or his testimony during trial. Teitelbaum's testimony was based on his review of biological samples, interviews, and documents, and assisted the truer of fact in understanding the potential injuries that could result from the conditions at the plant. The district judge did not abuse his discretion by denying the motion or by admitting the testimony.

To the extent that Hansen raises a *Brady* [18] claim that the government suppressed exculpatory or impeachment evidence by failing to disclose Teitelbaum's "checkered" past, we find that it is without basis. In order to state such a claim, a defendant must show (1) "that the government possessed evidence favorable to the defendant (including impeachment evidence). . .; (2) that the defendant does not possess the evidence nor could he obtain it himself with any reasonable diligence. . . (3) that the prosecution suppressed the favorable evidence. . .; and (4) that had the evidence been disclosed to the defense, a reasonable probability exists that the outcome of the proceedings would have been different." *United States v. Meros*, 866 F.2d 1304, 1308 (11th Cir. 1989) (per curiam). In this case, the evidence which Hansen alleges the government failed to disclose consists of court opinions either disregarding or discrediting Teitelbaum's testimony. Although Hansen argues that the government knew of this discredited testimony based on Teitelbaum's previous testimony for the government, Hansen fails to show that the government was in actual possession of the information or actually suppressed it. Further, the information was available to Hansen through reasonable diligence both before and

---

[18] *Brady v. Maryland*, 373 U.S. 83, 87, 83 S. Ct. 1194, 1196-97 (1963) ("The suppression by the prosecution of evidence favorable to the accused upon request violates due process where the evidence is material to guilt or to punishment, irrespective of the good faith or bad faith of the prosecution.").

during the trial.[19] The cases were all available through legal research and information on them could have been, but was not, addressed during Teitelbaum's testimony. Finally, the cases relied on by Hansen all relate to Teitelbaum's testimony in tort actions as to causation of a specific injury. They do not, therefore, have probative value as to his testimony regarding potential health effects of the chemicals or the employees' risk of death or serious injury after exposure to these chemicals. Hansen is unable to show a reasonable probability that the information would have changed the outcome of the proceedings.

Christopher Reh, an employee of the National Institute for Occupational Safety and Health ("NIOSH"), also testified for the government. R20-192. The district judge qualified him as an expert in the field of industrial hygiene.[20] *Id.* at 194.

---

[19] Hansen argues that Teitelbaum's testimony was "discredited" in four cases: *General Electric Co. v. Joiner*, 522 U.S. 136, 118 S. Ct. 512 (1997), *Sweger v. Texaco, Inc.*, Nos. 88-1781, 88-1834 and 88-2745 (10th Cir. Feb. 22, 1991); *Land v. United States*, 35 Fed. Cl. 345 (1996), and *National Bank of Commerce v. Associated Milk Producers, Inc.*, 22 F. Supp. 2d 942 (E.D. Ark. 1998). In *General Elec. Co.*, the Court found that the district court did not abuse its discretion in excluding the testimony of Teitelbaum (and other expert witnesses) because the studies on which he relied were not sufficient to support his conclusion. 522 U.S. at 146-47, 118 S. Ct. at 519. In *Sweger*, the court found that Teitelbaum's testimony did not provide the necessary certainty to establish causation. *Sweger*, slip op. at 1, 5-6. In *Land*, Teitelbaum appeared as the plaintiffs' medical expert. 35 Fed. Cl. at 352 n. 7. The hearing officer found Teitelbuam's "'preliminary' medical opinion" regarding the cause of the plaintiffs' injuries to be "of little value because Dr. Teitelbaum did not conduct physical examinations of the plaintiffs." *Id.* In *National Bank of Commerce*, the court found that Teitelbaum's view of the causation of the plaintiffs cancer was "undercut by the inadequacy of . . . reliable scientific proof of causation." 22 F. Supp. at 967.

[20] Neither Hansen nor his codefendants questioned Reh regarding his background or his area of expertise and raised no objections to Reh's qualification. R20-194.

Reh explained that he was assigned to the Brunswick plant as the project officer after NIOSH received "a valid request for a health hazard evaluation" from one of the plant's unions in 1987.[21] *Id.* at 196. He said that, during the initial site visit, he and his team met with Taylor, a plant engineer, and a few union representatives to discuss the request.[22] *Id.* at 196-98. They visited the plant, and observed "mercury in many places on the cellroom floor in cracks or crevices," and passively monitored mercury exposure in the workers' "breathing zone." *Id.* at 198-99. They found that the plant was not using the creatnine monitoring scale, but were reporting mercury levels by "micrograms per liter." *Id.* at 204. The monitors found that mercury exposure exceeded the NIOSH and OSHA recommended levels.[23] Taylor's objection to further testimony from Reh on the grounds of relevance was overruled. *Id.* at 201. Reh and his team advised Taylor of their findings by letter and recommended use of creatnine correction urine mercury monitoring which would indicate the amount of mercury per gram of creatnine. *Id.* at 201-03; Govt. Ex. 40-lb. From the results of the first visit, the team made a second visit to conduct a more in-depth study in 1988. R20-202. During the second visit, the team used an active sampling method to determine 28 workers' breathing zone exposure levels, collected urine samples from 58 workers, and administered questionnaires to and conducted physical

---

[21] Reh indicated that they were requested to evaluate the health hazards associated with mercury, chlorine, and hydrochloric acid. *Id.* R20-199, 203; Govt. Ex. 40-lb.

[22] The NIOSH team consisted of Reh, a medical doctor, and another industrial hygienist. R20-198.

[23] Reh explained that the MOSH recommended exposure levels ("REL") were 50 micrograms of mercury per cubic meter of air and that the OSHA permissible exposure levels ("PEL") are 100 micrograms of mercury per cubic meter of air. R20-200. He said that all of the sixteen monitored workers showed RELs above 50, and eleven of the monitored workers had levels above the PEL. *Id.* at 200-01.

examinations of 65 workers. *Id.* at 205-07. Taylor was provided with a written interim report in 1988 and a final report in 1991, both of which showed that workers had mercury levels above recommended standards.[24] *Id.* at 207-08, 210, 214; Govt. Ex. 40-lc and 1d.

The government offered Reh's testimony to show that the workers were placed "in imminent danger of death or serious bodily injury" and that Hansen, Randall, and Taylor were aware of the workers' exposure to hazardous substances. This testimony supports both of those propositions. The district court did not abuse its discretion by admitting the testimony of Reh.

B. *Insufficiency of the Evidence*

We review the denial of a motion for a new trial for abuse of discretion, and the denial of a motion for judgment of acquittal *de novo*. *United States v. Pistone*, 177 F.3d 957, 958 (11th Cir. 1999) (per curiam). To uphold the denial of a motion for judgment of acquittal, we "need only determine that a reasonable fact-finder could conclude that the evidence established the defendant's guilt beyond a reasonable doubt." *Id.* When considering the sufficiency of the evidence, we "view the facts and draw all reasonable inferences therefrom in the light most favorable to the government." *United States v. Slocum*, 708 F.2d 587, 594 (11th Cir. 1983).

1. Position of authority

"To prove aiding and abetting, the government must demonstrate that a substantive offense was committed, that the defendant associated himself with the criminal venture, and that he committed some act which furthered the crime."

---

[24] Reh reported that they found that 29 of the tested 58 workers had urine mercury levels which exceeded the World Health Organization recommended standard of 50. R20-208, 210. The average level was 136 micrograms per gram of creatinine, with a range from 2 to 689. *Id.* at 210.

United States v. Hamblin, 911 F.2d 551, 557 (11th Cir. 1990). "[T]he government must show that the defendant shared the same unlawful intent as the actual perpetrator" but does not need to prove that "the defendant was present at the scene when the crime occurred, or that he was an active participant." *Id.* at 557-58; *United States v. Pepe*, 747 F.2d 632, 665 (11th Cir. 1984) ("aider and abettor. . . need not even be present"). "Encouraging" a violation and "discouraging" the reporting of the violation, *United States v. Sinskey*, 119 F.3d 712, 718 (8th Cir. 1997), and "personally attempting to avoid [a violation's] detection by the [RCRA] inspectors," *United States v. Self*, 2 F.3d 1071, 1089 (10th Cir. 1993), have been held sufficient to show that a defendant aided and abetted the commission of a crime.

The indictment alleged that the defendants, "after learning that the Brunswick facility was disposing of hazardous wastes. . . without a RCRA permit, continued to operate the Brunswick facility in such a manner as to continue the disposal of these hazardous wastes without expending adequate funds. . . to prevent the disposal of such hazardous wastes into the environment." R1-1-11. The jury was instructed that the defendants were responsible for the acts of others that they "willfully directed," "authorized," or aided and abetted by "willfully joining together with [another] person in the commission of a crime." R22-181. The district court denied Taylor's motion to acquit or for a new trial on these charges finding that "the Defendants worked for LCP in positions of responsibility and authority while. . . the violations took place." R8-200-23.

a. Hansen

Hansen maintains that the evidence failed to show that he was in a position of authority after he was deposed as CEO in April 1993 until he began serving as plant manager on 16 July 1993, and not after he was officially replaced as plant manager by Allied employee Mark White on 18 October

1993. Therefore, he contends that the district court erred in not granting his motion for judgment of acquittal as to the 18 counts that occurred after 18 October 1993 (Counts 6-9, 14-15, 19-21, 23, 25, 29, 30-32, 38-40), the two counts that occurred between April and July 1993 (Counts 2 and 10), and the count that arose on 22 October 1993 (Count 33).

The testimony at trial indicated that Hansen was aware that wastewater was permitted to flow out the cellroom back door in June 1993,[25] and directed the use of the old Bunker C storage tanks for storage of wastewater, including the inadequately treated wastewater from the treatment system, from July through September 1993.[26] Although the acts continued after Hansen left his decision-making position, the acts occurred at his direction. This evidence was sufficient for the jury to reasonably conclude beyond a reasonable doubt that his acts were in furtherance of the violations. The district court did not err in denying Hansen's motion for judgment of acquittal or motion for new trial.

b. Randall

Randall claims that the government presented no evidence that he personally treated, stored, or disposed of a hazardous waste, personally effected a CWA violation, or instructed an agent to do so. He maintains that, under the laws of bankruptcy and corporate governance, he lacked the authority to close the plant or to allocate the funds for the needed

---

[25] Testimony of LCP former assistant production manager James Dunn, R20-327-28, 341.

[26] Testimony of former LCP health and safety manager Douglas Brent Hanson, R20-48-49, LCP maintenance handler and expeditor George Mower, P20-1 83, and LCP former production manager Duane Outhwaite, R20-350. Outhwaite testified that the storage tanks were used for wastewater overflow to keep the inadequately treated wastewater from "running out the door" and to help prevent the deep pools of wastewater from forming on the cellroom floors. R20-350, 358.

capital improvements. He contends that LCP needed the bankruptcy court's approval to use the bankruptcy estate's assets, or to obtain a new debt, to perform the needed repairs at the Brunswick plant.

In February 1994, LCP applied to the bankruptcy court for the funds "to shutdown" the plant and for new equipment, but the motion was denied. Def. Randall Ex. 1, Amended Notice of Motion at 5; R9-228, Ex. C and 8 Feb letter. Hanlin Board of Directors member James Mathis testified that Randall was responsible for "run[ning] the day-to-day operations of the company" once he became the interim CEO and COO. R19-160. He said that the Board was "very interested in whether the environmental problems-whether we were in a position of compliance with the environmental regulations. But the information that we had indicated that, really, compliance was not a problem." *Id.* at 164. He explained that, as a result of the weekly reports on the plant's operations, the Board believed that "there were really no excursions of any significance going on". *Id.* at 165.[27] Mathis said that Randall "had the primary responsibility" for providing information regarding the environmental compliance issues to the Board and that Hansen fed "information to Randall in that regard." *Id.* at 166. He agreed that the decision to sell the plant would have been a board decision requiring the approval of the bankruptcy court. *Id.* at 174-75.

LCP, as a debtor in possession, could "use the property of the estate in the ordinary course of business," but needed court approval to "use, sell, or lease, other than in the ordinary course of business, property of the estate." 11 U.S.C. § 363(c)(1) and (b)(1). It could obtain unsecured

---

[27] Mathis testified that there were places on the report forms for the "number of excursions" or environmental noncompliances which "were filled in with 'zeros' each time." R19-165. He said that they later leamed that the zeros were clerical errors. *Id.*

credit. . . in the ordinary course of business," but needed court approval "to obtain unsecured credit or to incur unsecured debt other than" "in the ordinary course of business." *Id.* at 364(a) and (b). Bankruptcy does not insulate a debtor from environmental regulatory statutes. In reviewing an injunction to clean up a hazardous waste site, the Supreme Court commented:

> [W]e do not suggest that [the debtor's] discharge [in bankruptcy] will shield him from prosecution for having violated the environmental laws . . . or for criminal contempt for not performing his obligations under the injunction prior to bankruptcy. . . [W]e do not hold that the injunction . . . against any conduct that will contribute to the pollution of the site or the State's wasters is dischargeable in bankruptcy. . . Finally, we do not question that anyone in possession of the site. . . must comply with the environmental laws. . . Plainly, that person or firm may not maintain a nuisance, pollute the waters of the State, or refuse to remove the source of such conditions.

Ohio v. Kovacs, 469 U.S. 274, 284-85, 105 S. Ct. 705, 710-11 (1985). *See also Midatlantic Nat'l Bank v. New Jersey Dept. of Envtl. Protection*, 474 U.S. 494, 407, 106 S. Ct. 755, 762 (1985) (A bankrupt debtor in possession "may not abandon property in contravention of a . . . regulation that is reasonably designed to protect the public health or safety from identified hazards.")

Although Randall claims that his role as Executive Vice-President and acting CEO was limited to financial matters, he also received daily reports about the plant's operations and environmental problems, R16-97-98, R21-359, wrote and received memos regarding specific plant operational problems, Govt. Ex. 104, 1-6f, 1-8a, 1-12, received monthly written environmental reports, Govt. Ex. 10-1o-10-1nn, 10-7c-7d, 10-7f and oral environmental reports, R21-64, 359. He

admitted that Hanlin's bankruptcy was not an excuse for violating environmental laws. R21-219-21. There is no indication that he asked the Hanlin Board or the bankruptcy court to close the plant. The evidence indicates that he apparently misled them into believing that environmental compliance was not a problem. After the Georgia EPD attempted to revoke the plant's NPDES permit in June 1993, Randall contested the revocation, explaining that the plant's CWA violations were due to a lightning strike and equipment failures, and asserted that "LCP has already taken steps to improve the situation." Govt. Ex. 10-6. This evidence was sufficient for the jury to conclude that Randall actions were in furtherance of the violations.

c. Taylor

Taylor argues that he should not be held responsible for the environmental violations that occurred after he resigned as plant manager, specifically counts 2-3, 25, 29-32, 38-41. Taylor resigned as plant manager on 16 July 1993, R21-245, but returned shortly thereafter as a project engineer and continued in that position until the plant closed, R21-246-47, 317-18. As project engineer, Taylor was directly involved in responding to the plant's environmental and safety problems and, at Hansen's request, developed a list of short-term solutions to the problems with estimated costs. R20-338; R21-247-48. Taylor's proposed solutions were subsequently funded. R21-247-48.

Although Taylor left his managerial position, he continued to work in a position in which he directed or authorized acts of the employees on environmental and safety problems.[28]

---

[28] Despite Taylor's resignation as plant manager and his re-employment as project engineer, he was considered to be in a management position. See R20-152 (D. Brent Hanson testified that Taylor was his immediate supervisor both before and after his resignation and re-employment); id at 335 (Dunn testified that Taylor "probably

Testimony at trial indicated that, in October 1993, Taylor was aware of the wastewater overflow from the cellrooms, the excess loss of mercury, and the use of the tank cars for wastewater storage, and that he supervised the release of the overflow.[29] This evidence was sufficient for the jury to conclude beyond a reasonable doubt that these acts were in furtherance of the violations. The district court did not err in denying his motion for a new trial.

2. Hazardous substances or materials

Taylor and Hansen argue that the government failed to prove that the untreated wastewater contained enough mercury and caustic to meet the environmental laws' definition of hazardous substances or materials, or that the untreated wastewater was improperly stored.

---

would have been plant manager" in late 1993), 337 (Dunn said that in "October of '93 I would assume [Taylor] was plant manager."); *id.* at 312, Govt Ex. 13-4 (19 January 1994 letter from Georgia EPD acting unit coordinator Susan Eason to "Plant Manager" Taylor in which she referenced Taylor's explanation for "NPDES excursions" at a 6 December 1993 meeting). *But see* Govt. Exs. 13-2ff, gg, hh, ii, and jj (letters from Mark S. White, as "Plant Manager," to EPD dated October-February 1994).

[29] Testimony of James Dunn. R20-335-39. Taylor directed a memorandum addressing the mercury losses and suggesting a solution to LCP employee Chris Dunn on 4 October 1993. Govt. Ex. 19-5. Dunn responded "yes" when asked whether Taylor was aware of the overflow release from the backdoor of the cellroom. R20-327-28. Dunn testified that Taylor observed the overflow "on the ground." *Id.* at 336. Dunn said that he told Taylor he was having trouble pumping the waste into the tank cars and that mercury loss was due to "leaks coming out of the products or it was tied up in hazardous waste muds." P20-337,339. By memorandum, Taylor proposed a flow plan for the projected waste streams of "19 to 125 gallons per minute" when the wastewater treatment system was only working at a 40 gallon per minute capacity. *Id.* at 340; Govt Ex. 19-4a. Wilbur Outhwaite testified that Taylor advised that the employees needed to empty the wastewater from the tank cars. P20-356.

a. Hazardous substances as defined

OSHA chemist Clinton Leroy Merrell testified that samples which were submitted from LCP on 9 September 1992 tested as containing 8 to 30 parts per million of mercury, and six to ten-percent caustic, with a pH of 14. R21-163, 165-67; Govt. Exs. 45-6, 45-9. Former LCP plant manager Hugh Leroy Croom testified that, in January 1993, the untreated wastewater may have had "a high pH, and . . . some mercury," but would not have contained mercury sludge. R16-91, 131-32. He said that the pH could be high enough to be a danger "at times" but that it did not stay high and varied according to the spills. *Id.* at 132; R19-35-36. However, he testified that muds containing mercury and caustic were washed onto the cellroom floors every three or four days when the treatment system's filters were back washed. R16-127-28; R19-103. When asked whether the wastewater on the cellroom floors would be considered a hazardous waste, Croom responded "[m]ost of the time, probably it was." R16-1 12-13 *see also Id.* at 128 (Croom admitted that wastes on the cellroom floor were listed as hazardous wastes).

Dr. Teitelbaum testified that a fall and submersion into caustic soda with a pH of 14 would cause a third-degree burn over the entire body with a likelihood of death. R20-241-42. LCP former employee Duane Carver testified that, some time between 1987 and 1993, he stepped into the cellroom sump hole and went in up to his waist. R19-226-28. He knew that the pH was "pretty high" because he quickly felt it. *Id.* at 228. He showered and was able to get most of it off so that he "didn't get burned all the way" and did not seek medical attention. *Id.* at 229-30, 251.

Environmental Protection Agency regulatory expert Paul Peronaud explained the hazardous waste classifications to the

jury, R21-11-13, and the jury was instructed as to various types of hazardous wastes, R22-199-200.[30]

The Waste Water Treatment Operators Logs for the periods of the indictment showed that the wastewater often contained more than 200 parts per billion of mercury.[31] Govt. Exs. 4, 5,

---

[30] Specifically, the jury was instructed:

> [T]he following wastes are listed as hazardous wastes under the Resource Conservation and Recovery Act, that is, RCRA:
>
> K- 106 is wastewater treatment sludge from the mercury cell process in chlorine production.
>
> K-071 is brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.
>
> And U-151 is simply mercury.
>
> Now you are instructed that a solid waste exhibits the characteristic of toxicity for mercury if, using the test methods set forth in the regulations, a representative sample of the waste contains mercury at a concentration of equal to or greater than 0.2 milligrams per liter.
>
> Under the law, liquid wastes which are "corrosive" are identified as hazardous wastes. A liquid waste is considered to be corrosive if a representative sample of the waste is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5.
>
> I instruct you that when a hazardous waste listed under the regulations is mixed with a solid waste, the resulting mixture is a hazardous waste if the reason for the listing of the hazardous waste is that it is a toxic waste.

P22-199-200.

[31] LCP former employee Carver explained that the line for "Discharge HC (ppb)" showed "the mercury level in the discharge water coming from the wastewater system." R19-209. The logs provided for thirteen readings per day, but readings were typically taken only twelve times per day. Mercury levels were recorded as above 200 for nine readings on 17 April, six readings on 28 June, eight readings on 28 August, four readings on 29 August, three readings on 12 September, four readings on 6 October, two readings on 9 October, three readings on 13 October, nine readings on 18 October, six readings on October 22, and

6-1. Former LCP employee Dunn testified that Taylor directed the employees to "put a sign up" labeling the wastewater in the rail cars as "[h]azardous waste materials." R20-345. Taylor testified that the pH of the plant's wastewater was normally between seven and ten, and in concentration of eight to ten percent. R21-262, 264.

> A "hazardous waste" is defined as a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—
>
> (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
>
> (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed.

42 U.S.C. § 6903(5). Hazardous wastes are categorized as either "listed" hazardous substances or "characteristic" hazardous substances. 40 C.F.R. § 261.3(a); R21-11-15. The "characteristic" hazardous substances are not per se hazardous but may be classified as hazardous if, because of a mixture with a hazardous substance, testing proves that the substance exhibits characteristics of hazardous waste. 40 C.F.R. §§ 261.3(a)(2)(i) and 261.20(a). Characteristics of hazardous waste include ignitability, corrosivity, reactivity, and toxicity. 40 C.F.R. §§ 261.21, 261.22, 261.23, and 261.24. Wastewater containing mercury is classified as a characteristic hazardous substance when the water contains 200 parts per billion or more of mercury. *Id.* at §261.24 (a),

---

nine readings on 5 November, 1993. Govt. Exs. 4, 5, 6-1. The logs show that the system was not working during readings on 17 April, 21 June, 27-28 June, 29 August, 12 September, 6-9 October, 12-13 October, and 18-21 October 1993. *Id.*

Table. "Wastewater treatment sludge from the mercury cell process in chlorine production" is listed as hazardous waste K106. *Id.* at § 261.32. Wastewater containing caustic is classified as a characteristic hazardous substance when the water "has a pH less than or equal to 2 or greater than or equal to 12.5." *Id.* at § 261 .22(a)(1). Once solid wastes are mixed with sludge or caustic, they are defined as hazardous. *Id.* at § 261.3(a)(2)(iv).

Where there is no sampling of the actual wastes, the government may prove the hazardous nature of the material by inventories, hazardous waste logs, internal memoranda, and trial testimony. *United States v. Baytank (Houston), Inc.*, 934 F.2d 599, 614 (5th Cir. 1991). The government is not required to prove that material is hazardous by EPA testing. *United States v. Self*, 2 F.3d 1071, 1086 (10th Cir. 1993). We find that the testimony of the former LCP employees and the wastewater logs were sufficient for the jury to find that the untreated wastewater contained enough mercury and caustic to meet the environmental laws' definition of hazardous substances or materials.

b. Storage of hazardous materials.

Taylor and Hansen maintain that the accumulation of wastewater on the cellroom floors did not violate federal law because the wastewaters were not stored there for the statutory requisite of 90 days. Croom testified that hazardous wastewater was on the cellroom floors "[a]t times," R16-114, and that hazardous materials were shipped, turned over, or treated within 90 days, R19-41. In response to a question as to whether wastewater on the cellroom floors was a regular occurrence in 1992, he responded that it was in both cellrooms in 1992, but when he left "it was just mostly in #2." R16-114. Former LCP employee Roger Cooper testified that on 28 June 1993, although wastewater was pumped to the railcars for storage from cellroom two, the cellroom one floor was dry. R19-275-76, 28 1-82; Govt. Ex. 6-1. He explained

that they "tried to keep [the wastewater in cellroom one] pumped over to #2 cellroom" because of the possibility that water would escape from cellroom one as a result of cracks in its floor. R19-284-85. Dirt dikes were constructed in the cellrooms to prevent the wastewater from leaking, but the dikes were frequently breached. R19-256; R25-26. The cellrooms were often "full of water" so that the employees had to wade into standing wastewater to repair the pumps. R20-318; R19-205.

Hazardous waste generators are permitted to "accumulate hazardous waste on-site for 90 days or less without a permit" if "the waste is placed" in tanks visibly marked with "[t]he date upon which each period of accumulation begins" and clearly labeled as "Hazardous Waste." 40 C.F.R. § 262.34(a)(l)(ii), (2), and (3). A "tank" is "a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials . . . which provide structural support." 40 C.F.R. § 260.10.

There was no evidence that suggested that the cellrooms, in which earthen berms were constructed to contain the wastewater, were marked with the date of accumulation or labeled as containing hazardous wastes and thus qualified as "tanks." The testimony and logs indicate that the wastewater, which may have abated in cellroom one during various periods of time, remained in cellroom two and was present for more than 90 days. Therefore, the evidence was sufficient for the jury to find that the wastewater was improperly stored.

3. Knowing Endangerment Under RCRA

Hansen, Randall, and Taylor argue that the evidence was insufficient to convict them for knowing endangerment. They acknowledge that the government may have shown that they "could have been aware" of the inherent dangers of working in a chlor-alkali plant, but argue that it failed to show that they knew and had an actual belief that the conduct

which allegedly violated the environmental laws was substantially certain to cause death or serious bodily injury to others. Specifically, they maintain that, while the evidence showed that the employees were exposed to mercury, the evidence did not show that they were endangered due to any RCRA violation. They contend that the evidence of the employees' exposure to caustic was not sufficient to support the conviction for knowing endangerment. They claim that the government did not show that they had actual knowledge that their conduct in causing the RCRA violation was at that time substantially certain to place the employees in imminent danger of death or serious bodily injury. They also posit that there was no evidence that they were participants in any alleged conspiracy.

For a conviction of knowing endangerment under the RCRA, the government must prove that the defendants knowingly caused the illegal treatment, storage, or disposal of hazardous wastes while knowing that such conduct placed others in imminent danger of death or serious injury. 42 U.S.C. § 6928(e). A defendant acts "knowingly" "if he is aware or believes that his conduct is substantially certain to cause danger of death or serious bodily injury." *Id.* at 6928(f)(l)(C). The defendant must have possessed "actual awareness or actual belief." *Id.* at 6928(f)(2)(A). Circumstantial evidence, "including evidence that the defendant took affirmative steps to shield himself from relevant information," may be used to prove the defendant's awareness or belief. *Id.* The knowing endangerment statute was drafted to "assure to the extent possible that persons are not prosecuted or convicted unjustly for making difficult business judgments where such judgments are made without the necessary scienter" "however dire may be the danger in fact created." S. Rep. 96-172, at 37-38 (1979), *reprinted in* 1980 U.S.C.C.A.N. 5019, 5036-38. The penalties imposed by the knowing endangerment section were "designed for the occasional case where the defendant's knowing conduct

shows that his respect for human life is utterly lacking and it is merely fortuitous that his conduct may not have caused a disaster." *Id.* at 38, 1980 U.S.C.C.A.N. at 5038. We have held that "[t]he government need only prove that a defendant had knowledge of the general hazardous character of the chemical" and knew "that the chemicals have the potential to be harmful to others or to the environment." *United States v. Goldsmith*, 978 F.2d 643, 645-646 (11th Cir. 1992) (per curiam) (internal quotations and citation omitted). "[W]hile knowledge of prior illegal activity is not conclusive as to whether a defendant possessed the requisite knowledge of later illegal activity, it most certainly provides circumstantial evidence of the defendant's later knowledge from which the jury may draw the necessary inference." *Self*, 2 F.3d at 1088.

The statute defines "serious bodily injury" as "(A) bodily injury which involves a substantial risk of death; (B) unconsciousness; (C) extreme physical pain; (D) protracted and obvious disfigurement; or (E) protracted loss or impairment of the function of a bodily member, organ, or mental faculty." 42 U.S.C. § 6928(f)(6). A condition which may cause one of the statutorily defined conditions is sufficient to show "serious bodily injury." *See United States v. Protex Industries. Inc.*, 874 F.2d 740, 743 (10th Cir. 1989) (finding that a serious bodily injury was suffered by employees who contracted psychoorganic syndrome which may cause a mental faculties impairment).

a. The Evidence of Endangerment

Former LCP employees testified that they suffered serious skin and respiratory conditions from the wastewater on the cellroom floors.[32] A November 1992 memorandum from

[32] Hugh Croom explained that "when the pH was high [in the wastewater on the cellroom floors] and somebody stepped over in it, it could easily burn their skin on their legs." R16-121. He volunteered that caustic could "peel the skin off" a person if he or she fell into it. R19-107.

Taylor to Randall showed Taylor's concern for needed repairs "to avert severe safety and environmental problems." Govt. Ex. 1-5. The urinalysis testing on employees showed "an increase" in the number with mercury levels which exceeded the 150 action level from 1986 to 1993. R21-294-96. Taylor admitted that most of the employees in the cellroom were removed to other plant locations "before any medical condition occurred" but said that he did not see any "reason to draw any correlation between" the rise in the number of employees exposed to excess mercury and the dumping of hazardous wastes and mercury. *Id.* at 294, 296.[33]

Expert testimony and reports linked exposure to mercury and caustic to a variety of serious health problems. The National Institute for Occupational Safety and Health (NIOSH) report on sodium hydroxide caustic indicated that local contact with caustic could result in "extensive damage to tissues, with resultant blindness, cutaneous burns, and perforations of the alimentary tract," with potential for development of "squamous cell carcinomas." Govt. Ex. 17-

---

He said that airborne mercury could cause problems because of the potential for accumulation in the body. *Id.* at 108. Duane Carver testified that he received second- and third-degree burns on his thighs, R19-182, 197, and that he and other employees shoveled mercury off the cellroom floors, R19-192. He explained that there was "plenty" of mercury to see "under the mud and also beaded up on top in the mud." *Id.* He said that "[t]here would be so much [mercury] that it would be running off of the mud" and that "[y]ou could get a shovelful and lean your shovel over, and the mercury would just run off the shove] onto the floor." *Id.* at 192-93. John Baker testified that the wastewater "would cause severe burns." *Id.* at 245.

[33] Taylor commented that "[j]ust because the trend happened to be the same on two completely unrelated events, does not necessarily tie them together." R21-296. He said that he "noticed a similar trend on two completely unrelated events." *Id.* at 297. He admitted "that the mercury vapor levels in the workplace did increase" and that "drums of dried waste can be a source of mercury." *Id.* at 297-98.

7b. The NIOSH report on inorganic mercury warned of the effects of mercury and mercury vapors to the central nervous system. Govt. Ex. 17-7c. Dr. Teitelbaum testified that exposure to caustic could cause burns ranging from first- to third-degree and could be lethal, and that exposure to mercury could cause mild tremors, personality changes, some detectable neurological abnormalities, changes in kidney function to severe kidney damage with potential death, and immune system problems. R20-229, 239-42. Dr. Teitelbaum opined that the employees were in danger of death or serious bodily injury." R20-248. The evidence was sufficient for the jury to find that the defendants placed others in danger of death or serious bodily injury.

b. The Evidence of *Mens Rea*

The evidence showed that Hansen, Randall, and Taylor knew that the conditions of the plant were dangerous and that the conditions posed a serious danger to the employees. LCP former employee Wilbur Duane Outhwaite testified that he voiced his opposition to the use of the Bunker "C" storage with Hansen, and that Hansen responded that it was "his decision to make, and he decided to use them." R20-350. LCP acting plant manager Hugh Croom discussed his concerns regarding the dangerous conditions in the cellroom and the danger to the employees with Randall. R16-129-30. Croom and LCP former employee Outhwaite testified that Randall received daily reports from the plant managers concerning plant operations and "safety problems." R16-97-98; R20-359, 374. Randall was aware of the water on the cellroom floor and "wouldn't say that [he] wasn't unaware of the hazard," but thought that the walkway was "an acceptable resolution" to "eliminating the hazard to the employees while we worked to dry the cellroom floor." R21-224-25. He conceded that he was aware that the company was cited for willful violation of OSHA safety regulations as a result of water on cellroom floors. *Id.* at 225; Govt. Ex. 10-7i. Jesse

Jones, a former LCP employee and a union representative, met with Randall to discuss the employees' safety issues, and Randall promised the needed repairs. R21-148. He said that he discussed the safety concerns, specifically "the water condition, the deterioration of the plant with the pipes, the leaks, and the safety equipment[]" with Hansen and Taylor. *Id.* at 146. Between 3 August 1993, and 4 February 1994, Randall was sent 22 reports listing 110 different violations of the NPDES standards. Govt. Exs. 10-1o-10-1nn. As LCP's environmental manager, Brent Hanson regularly advised Randall of the plant's environmental problems "[w]henever he was interested in things" and by monthly reports. R20-64-65.

As early as 1988, NIOSH informed Taylor that the plant employees had "extremely high" levels of mercury in their bodies which created "an unacceptably high potential for health effects," and that the mercury-contaminated wastes should be kept in vapor-proof containers. Govt Ex. 40-1c at 2. Despite this, the employees' exposure to high levels of mercury continued. In 1992, Taylor addressed his concerns about "severe safety" problems in a memorandum to Randall. Govt. Ex. 1-5. Taylor was aware that, during the spring of 1993, 23 cellroom employees were removed from their duty in the cellrooms due to their high levels of mercury and that the mercury level in the workplace increased. R21-294-95, 297. Taylor was aware of and concerned by the mercury-contaminated waste which was stored in drums in the cellrooms' basement and which was emitting elevated levels of mercury fumes. *Id.* at 298-303. He admitted that the mercury-contaminated mud on the cellroom floors posed a health risk and needed to be monitored. *Id.* at 301-02. He testified that, on occasion, he would get into the water wearing protective equipment to make repairs and improvements to the pumps, and admitted that, if the wastewater got onto bare skin and was caustic, "you would start to feel a little burning or a little heat sensation" but that

it could be neutralized by washing with the safety solution. *Id.* at 263-64. He said that such burns were "not unusual" in a caustic soda manufacturing plant through employee carelessness and equipment failures. *Id.* at 264.

c. Consent to the Risks

The RCRA knowing endangerment provision can be affirmatively defended if "the conduct charged was consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of-A) an occupation, a business, or a profession." 42 U.S.C. § 6928(f)(3). The evidence showed that the plant's environmental violations seriously endangered the employees and were not typical to chlor-alkali plants. Hugh Croom, the plant manager for the LCP chlor-alkali plant in North Carolina, testified that the dangerous conditions in the Brunswick plant were not present in the North Carolina plant because the North Carolina plant had adequate waste treatment equipment and facility maintenance. R16-108-09, 127-29; R19-32-34, 52, 107-09, 110-11. He said that he discussed his concerns regarding the environmental issues, the wastewater treatment system issues, and the dangers to the employees with Randall and with Taylor. R16-129-30. LCP environmental manager Brent Hanson noted that, although covering mercury with water to limit mercury vapors was an accepted practice within the chlor-alkali industry, it was usually practiced "in a little more confined manner" than the condition of the cellrooms, it was not an industry practice to allow such quantities of mercury to accumulate on the cellroom floors, and he knew of no other chlor-alkali plants that permitted such a condition to exist. R20-145, 153. Dr. Teitelbaum testified that, although he did not think that "you can get a zero risk" in a chlor-alkali plant, he thought "you can make chlor-alkali plants safe so that

workers under everyday conditions are extremely unlikely to be hurt." R20-245.[34]

The employees also did not freely consent to conditions at the plant. They complained to management, including Hansen, Randall, and Taylor, about the dangerous working conditions, and refused to work in the cellrooms. Union representative and former plant employee Jesse Jones testified that LCP suspended nine employees who refused to "go underneath the cellroom to repair the pump" because of the wastewater on the cellroom floor. R21-138-42. Jones said that he discussed his concerns about the working conditions with Hansen, Randall, and Taylor. R21-138-39, 146-48. Former employee Larry Barwick said that he complained "to whoever would listen," including the LCP management, about the fumes[35] and visible mercury in the cell buildings.[36] R20-319-20. He refused to go into the

---

[34] He noted that "the Swedish chlor-alkali industry . . . had air levels of 20 or below and urine levels which almost never exceeded 30" in 1990, demonstrating that such an environment was possible. P20-245. He explained that a safe environment could be promoted by the use of industrial hygiene, including "engineering controls, protective equipment, substitution of materials in places where you can substitute, and administrative controls as to how long and what kind of environments people work in." *Id.* at 246.

[35] Barwick said that:

> [T]he fumes from the acid burners were coming down and you couldn't breathe without wearing a respirator.
>
> It would burn your skin, it would take the hair off of your arms. It would get in your eyes, under your goggles. And everything-it had caustic. It had bleach. It had acid fumes . . . After probably the last year or year and a half, that was probably a regular everyday thing almost, that you would get gas somewhere in [the cell building]. P20-319-20.

[36] Barwick testified that the mercury "was everywhere . . . the floors, the ledges, the beams, any place you had to get up in to to change headers . . . You would have mercury on the beams. You would have mercury on

cellrooms, and was once sent home for the day based on his refusal. R20-321. The evidence, therefore, was sufficient to show that the defendants knew that the plant's violations of the CWA and RCRA violations were inevitable, that the plant was incapable of complying with environmental standards, and that the employees were endangered while working within this environment without consenting to the risk.

4. Conspiracy

Hansen, Randall, and Taylor argue that the district court erred by not granting their motions for acquittal because the government never proved a conspiracy. They maintain there was no showing of an agreement between them, the operation of the plant was a legal act, and they did not pursue the objectives of the conspiracy. Randall suggests that the evidence showed that he took affirmative steps to improve compliance. Taylor contends that he was not involved in the operations at the Brunswick plant for a significant period of the "conspiracy" and authored several memos to management expressing his concerns regarding the plant's operation once he began working there. He maintains that, after assuming the plant manager position, he recommended shutting down the plant or at least one of the cellrooms and, when those recommendations were rejected, he spent several months seeking money for maintenance. He also argues that the evidence showed that he directed that the reports be truthful and accurate.

To obtain a conviction under 18 U.S.C. § 371, "the government must show: '(1) the existence of an agreement to achieve an unlawful objective; (2) the defendant's knowing and voluntary participation in the conspiracy; and (3) the commission of an overt act in furtherance of the conspiracy.'"

---

the floors. When you would take the headers apart, mercury would run out of them." R20-320.

United States v. Harmas, 974 F.2d 1262, 1267 (11th Cir. 1992) (quoting *United States v. Cure*, 804 F.2d 625, 628-30 (11th Cir. 1986)). "An agreement may be proved by either direct or circumstantial evidence and a common scheme or plan may be inferred from the conduct of the participants or from other circumstances." *United States v. Diaz*, 190 F.3d 1247, 1254 (11th Cir. 1999). However, it is "essential" "that the object of the agreement must be illegal." *United States v. Toler*, 144 F.3d 1423, 1426 (11th Cir. 1998). "Each party to a continuing conspiracy may be vicariously liable for substantive criminal offenses committed by a co-conspirator during the course and in the furtherance of the conspiracy, notwithstanding the party's non-participation in the offenses or lack of knowledge thereof." *United States v. Mothersill*, 87 F.3d 1214, 1218 (11th Cir. 1996) (*citing Pinkerton v. United States*, 328 U.S. 640, 646-47, 66 S. Ct. 1180, 1184 (1946)). In the usual *Pinkerton* case, it is not necessary for the court to inquire into a particular conspirator's individual culpability, "so long as the substantive crime was a reasonably foreseeable consequence of the conspiracy." *United States v. Alvarez*, 755 F.2d 830, 849-50 (11th Cir. 1985). It is unnecessary for the government to prove that each conspirator participated in all aspects of a conspiracy, knew each phase or every detail of the conspiracy, or knew all of the participants. *United States v. Pedrick*, 181 F.3d 1264, 1272 (11th Cir. 1999). A conspirator may be convicted if he "participates in some affirmative conduct designed to aid the success of the venture with knowledge that h[is] actions would further the venture." *Id.* A defendant may be convicted of conspiracy if he joined the conspiracy after its inception and played only a minor role within it, *United States v. Knowles*, 66 F.3d 1146, 1155 (11th Cir. 1995), and he is presumed to be a part of the conspiracy until all conspiracy activity ceases or he proves that he withdrew. *United States v. LeQuire*, 943 F.2d 1554, 1563-64 (11th Cir. 1991). To show withdrawal, a conspirator must show that he

"has taken affirmative steps to defeat the objectives of the conspiracy," and "made a reasonable effort to communicate these acts to his co-conspirators or disclosed the scheme to law enforcement officers." *Id.* at 1564.

The indictment charged that, from July 1985 to 1 February 1994, Hansen, Randall, and Taylor "did knowingly and willfully combine, conspire, confederate and agree together and with others" to knowingly act in violation of the environmental laws by "continu[ing] to operate the Brunswick facility" after learning that they were in violation, storing and disposing of hazardous wastes without a permit, and submitting "incomplete, inaccurate, and misleading information" in their reports to the various state and federal regulatory agencies. R1-1-10-14. The evidence showed that the defendants admitting to sharing the common goal to operate the plant until a buyer could be found. The jury could infer from this goal and the defendants' knowledge of the plant's continuing problems with worker safety and environmental compliance that they reached a tacit agreement to operate the plant in violation of environmental laws. The defendants knew of the violations from either personal observation or from information that they received from the plant employees, and frequently communicated with each other regarding operation of the plant despite the continuous environmental concerns. The defendants failed to provide the corporate board with information about the violations, and failed to accurately present the plant's inability to comply with the regulations to the Georgia EPD. Each of the substantive offenses were foreseeable consequences of the agreement to continue operating the plant in violation of the environmental statutes.

5. Knowledge of the Substantive Offenses

Randall argues that the district court erred in denying his motion for acquittal because the government failed to show

that he had the requisite "knowledge" of the CWA and RCRA violations on the specific dates when they occurred. He contends that his knowledge after the violations had occurred was not sufficient. The statutes for the violations under which Randall was indicted contain explicit knowledge requirements. For a conviction under 33 U.S.C. § 131 9(d)(2)(A), the defendant must be shown to have "knowingly" violated various sections of the CWA or permit conditions or limitations. For a conviction under 42 U.S.C. § 6928(d)(2)(A), the defendant must be shown to have "knowingly" treated, stored, or disposed of an identified hazardous waste without a permit. We have held that the knowledge element is satisfied where a defendant, who may not have "directly" caused a hazardous waste violation but had "approved of previous dumpings as a way to meet storage squeezes," "effectively ordered" a subsequent violation when he instructed a subordinate to "handle" hazardous waste. *United States v. Greer*, 850 F.2d 1447, 1451-52 (11th Cir. 1988).

Here, although Randall did not directly cause the violations, he knew that the plant was violating its permit on an almost daily basis, accumulating wastes that it could not treat, and was frequently releasing the wastes from the cellrooms as needed to keep the plant operational. He received 22 written reports between 3 August 1993 and 4 February 1994 advising him of a total of 110 different violations of the NPDES permit. He received frequent and sometimes daily oral and written reports from the various plant managers of the plant's operations and safety concerns. He knew that the plant was incapable of complying with the environmental standards and knew that the violations were inevitable. We conclude that the evidence that Randall permitted the plant employees to process the hazardous wastes as they had in the past despite his knowledge that the procedures were in violation of environmental regulations was sufficient to show that Randall acted "knowingly."

C. Jury Instructions

Hansen, Randall, and Taylor argue that the district court's jury instructions misstated the reasonable doubt standard, improperly applied the concept of responsible corporate officer, improperly defined the elements of knowing endangerment, and effectively eliminated the mens rea requirement from each of these statutory violations. Hansen contends that the instructions essentially instructed the jury that they could convict him because of his job title.

" 'We review jury instructions *de novo* to determine whether they misstate the law or mislead the jury to the prejudice of the objecting party.'" *United States v. Grigsby*, 111 F.3d 806, 814 (11th Cir. 1997), quoting *United States v. Chandler*, 996 F.2d 1073, 1085 (11th Cir. 1993). We review the district court's denial of a requested instruction for abuse of discretion, because a defendant is entitled to an instruction on a defense theory if it has some basis in the evidence and is supported by law. *Grigsby*, 111 F.3d at 814. A defendant cannot challenge a jury instruction on a ground not raised at trial unless he establishes "plain error" under Fed.R.Crim.P.52(b). *United States v. Meester*, 762 F.2d 867, 879-80 (11th Cir. 1985). If the requirements of Rule 52(b) are satisfied and the instruction was made in error, is plain, and affected substantial rights, we "may then exercise [our] discretion to notice a forfeited error, . . . only if the error seriously affect[ed] the fairness, integrity, or public reputation of judicial proceedings." *Johnson v. United States*, 520 U.S. 461, 466-68, 117 5. Ct. 1544, 1548-49 (1997) (internal citations omitted). Under the invited error doctrine, we will generally not review an error induced or invited by a party through the submission of an incorrect jury instruction to the judge which passed on to the jury. *United States v. Stone*, 139 F.3d 822, 838 (11th Cir. 1998) (per curiam).

1. Reasonable Doubt Standard

Hansen and Randall maintain that the district judge misstated the essential basis of the convictions by instructing that the government did not have to prove guilt beyond a reasonable doubt. In his introduction to the jury instructions, the district judge advised the jury that he would read them the jury charge and would provide them each a copy of the charge for them to "refer to it at any time you think is appropriate" when they were sent out to deliberate. R22-172. The district judge then orally instructed the jury on reasonable doubt as follows:

> So the Government always has the burden of proving a Defendant guilty beyond a reasonable doubt. If it fails to do so, under your oath, you would have to find that Defendant not guilty.
>
> *But while the Government 's burden is a heavy burden, it is not necessary that the Defendant's guilt be proved beyond a reasonable doubt, because that is generally impossible. The law does not require a mathematical certainty, only the exclusion of any reasonable doubt concerning that Defendant's guilt.*
>
> In that regard, a "reasonable doubt" is defined as a real doubt, based upon reason and common sense after a careful and impartial consideration of the entire evidence in this case, or the lack of evidence.
>
> Proof beyond a reasonable doubt, in other words, is proof of such a convincing character that you would be willing to rely or act upon it without hesitation in a decision involving the most important of your affairs. But you take a common sense view. . . .
>
> You may not find a Defendant guilty unless you find that the inferences you draw from the evidence are consistent with the theory of his guilt and inconsistent

> with reasonable theories of innocence. If you are convinced that a Defendant has been proved guilty beyond a reasonable doubt, say so with a verdict of guilty. On the contrary, if you have reasonable doubt, then under your oath, you would have to find that Defendant not guilty.

R22-174-75 (emphasis added). No objection was made as to this instruction. R22-206-O9.[37]

The passage, as provided to the jury in the written charge, read:

> Thus, while the Government's burden of proof is a strict or heavy burden, it is not necessary that a Defendant's guilt be proved beyond all possible doubt. It is only required that the Government's proof exclude any "reasonable doubt" concerning a Defendant's guilt.

R6-133-2.

"[W]e consider [a reasonable doubt] instruction as a whole to determine if the instruction misleads the jury as to the government's burden of proof." *Harvell v. Nagle*, 58 F.3d 1541, 1542 (11th Cir. 1995). The jury must be instructed that defendant's guilt must be proved by the government "beyond a reasonable doubt" on each element of the charged offense,

---

[37] The government argues that there may be an error in the transcript. Government brief at 23. There is no indication that this matter was submitted to and settled by the district court consistent with the procedure outlined in Fed.R.App.P. 10(e).

The district judge provided the parties with an opportunity to "[s]tate [their] exceptions" after the jury instructions were read. R22-206-09. Taylor's counsel said he had been "listening carefully to the charge" and had heard the word "water" used in the place of "wastes." *Id.* at 208. He then noted that the jury "will have it to read." *Id.* Taylor's counsel also observed that the word "person" had been defined as an "individual corporate officer" instead of a "responsible corporate officer;" the judge made a curative instruction. *Id.* at 208-09.

but the trial court is not required to define reasonable doubt. *Id.* If the trial court defines reasonable doubt, the standard must be explained correctly. *Id.* A district court's failure to submit an element of the offense to the jury, including an erroneous instruction on reasonable doubt, is a structural error which defies the harmless-error analysis. *Johnson*, 520 U.S. at 468-69, 117 S. Ct. 1544 at 1549-50. Although we have held that "an inadequate reasonable doubt instruction cannot be cured by other circumstances at trial," *Nutter v. White*, 39 F.3d 1154, 1158 (11th Cir. 1994) (reversing a conviction in which the instruction defined reasonable doubt using the phrase "substantial doubt"), "[j]ury instructions are not considered in isolation; rather we view them in the context of the entire... proceeding." *Waters v. Thomas*, 46 F.3d 1506, 1524 (11th Cir. 1995).

Here, the improper passage is immediately prefaced and followed by a correct instruction, and the correct instruction was included in the written copy provided to each juror. The judge stated the correct instruction numerous times, including each element of each offense to be proven. *See* R22-172, 173, 182, 185, 187, 189, 193-94, 199-201. The instruction, as written and as provided to the jury, was not inadequate and presented the correct reasonable doubt standard. Viewing this instruction as a whole and in the context of the entire proceeding, we find that it did not mislead the jury as to the reasonable doubt standard. *See United States v. Torres*, 901 F.2d 205, 243 (2nd Cir. 1990) (rejecting a challenge to the language used in one sentence of a reasonable doubt standard where a correct instruction was provided "immediately after" the challenged language and provided at least five times in the instructions in general and as to the specific offenses); *but see Bloomer v. United States*, 162 F.3d 187, 189, 194 (2nd Cir. 1998) (finding an improper reasonable doubt instruction constitutionally deficient despite at least 17 proper instructions where there was no curative instruction to alert the jury to disregard the incorrect instruction.)

2. Reasonable Corporate Officer

Hansen and Randall contend that the district judge undermined the jury's fact-finding function by directing that they treat the defendants as "responsible corporate officers" ("RCO"). They maintain that the instruction as given permitted the jury to convict them on the basis of their corporate positions instead of their individual liability. They suggest that the district court's separate RCO instruction allowed the jury to believe that it applied equally to the conspiracy, CWA and RCRA charges.

The district judge instructed the jury:

> Under the federal Clean Water Act, the definition of a "person" specifically includes corporations and individual corporate officers. You are instructed that the Defendants, Christian Hansen, Randall Hansen, and Alfred Taylor are persons for purposes of the Clean Water Act.

R22-191. Taylor's attorney objected that "[t]he statute says, '. . . and responsible corporate officers.'" R22-209. The district judge then explained "[w]herever I have used the term 'corporate officers,' I mean responsible corporate officers." *Id.*

In a CWA case, "the term 'person' means . . . any responsible corporate officer." 33 U.S.C. § 1319(c)(6). The RCRA counts require proof that each defendant "knew" of the violations' potential for harm and danger. 42 U.S.C. § 6928(e). In *United States v. MacDonald & Watson Waste Oil Co.*, 933 F.2d 35 (1st Cir. 1991), the First Circuit vacated a conviction under 42 U.S.C. § 6928(d)(1) after finding that the district court's instruction, which relied on the RCO doctrine in part and which instructed "that the officer must have known or believed that the illegal activity of the type alleged occurred" incorrectly permitted a finding of guilt without a determination that the defendant possessed actual

knowledge of the specific violation. *Id.* at 51. The First Circuit reasoned that the RCO doctrine was inapplicable where the defendant was charged under a statute that required explicit knowledge. *Id.* 51-55. The Ninth Circuit has held that:

> [U]nder the CWA, a person is a 'responsible corporate officer' if the person has authority to exercise control over the corporation's activity that is causing the discharges. There is no requirement that the officer in fact exercise such authority or that the corporation expressly vest a duty in the officer to oversee the activity.

United States v. Iverson, 162 F.3d 1015, 1025 (9th Cir. 1998). Explaining that "[t]he relevant inquiry is whether the instructions *as a whole* are misleading or inadequate," the Ninth Circuit rejected the defendant's argument that the RCO "instruction allowed the jury to convict him without finding a violation of the CWA." *Id.* at 1026. The district judge had stated the elements needed for the government's proof and told the jury that the CWA "'also holds accountable'" RCOs. *Id.* The Ninth Circuit found the instructions not erroneous, reasoning that "the [RCO] instruction relieved the government *only* of having to prove that defendant *personally* discharged or caused the discharge of a pollutant" and that "[t]he government still had to prove that the discharges violated the law and that defendant knew that the discharges were pollutants." *Id.* We find this issue meritless. The clarifying instruction given by the district court was requested by the defendants. The district court's instruction on responsible corporate officer was not given as to the CWA counts, Counts 2-21, but was given only as to Counts 22-34.

3. Knowing Endangerment

Hansen argues that the instructions authorized the jury to convict him of knowing endangerment without making a

determination that he knew of an imminent danger. Hansen requested that the instruction include the "element of knowingly" on "each element of the offense" to insure that the jury understood that the charges were related to "individual, personal, knowing, knowledgeable, deliberate conduct." R22-53-55. The district judge noted that the preface to the instructions included "knowingly" and agreed that he would add an instruction that "[t]he term knowingly is applicable to each element of the offense." *Id.* at 54, 56. Hansen's attorney responded "[t]hat would help, Judge." *Id.* at 56. Later, the government requested that the instructions for "willful" be limited to count 1 and that the instructions for "knowingly" apply to the remaining counts. *Id.* at 70-71. Hansen's attorney stated that he "strongly disagree[d]," but the judge indicated that he would permit the instruction, as clarified, to stand. *Id.* at 71. At the end of the charge conference, Hansen's attorney renewed his objection to the district judge's failure to give the knowing instruction as to each offense. *Id.* at 206-07. Because the instruction required that the jury find that Hansen knew that the violations could cause imminent danger, this argument is meritless.

4. Mens Rea Requirement

Hansen argues that the instructions permitted the jury to convict him of the RCRA violations without making factual findings that he had knowledge of the RCRA elements of hazardous materials, permit regulations, and the treatment, storage, or disposal of hazardous wastes. He maintains that the instruction reinforced the government's position that Hansen should be convicted because LCP was his company, and not based on the legally required relationship between Hansen and the violations. During the charge conference, Randall's attorney objected to an instruction as to Counts 22-34, arguing that it should be limited to Counts 22-33, because Count 34 had additional elements. R22-59-63, 65-66. He asked that an instruction be added limiting liability to

knowledge possessed by the defendant himself, and the district judge responded "[a]ll right. All right. We will add that.". *Id.* at 61.

During closing argument, the government stated:

> Chris Hansen is a hands-on manager. You heard discussions of how he ran the plant. I would submit it was probably his way or the highway. Does anybody doubt he would have known what was going on at every place in the plant? He was there. He ordered the Bunker C tanks to be filled.

R22-99-100. The district judge explained that:

> a person acts knowingly if he acts intentionally and voluntarily, realizing what he is doing, and not because of ignorance, mistake, accident, or carelessness. Whether a Defendant acted knowingly may be proven by the Defendant's conduct and by all of the facts and circumstances surrounding the case.

Id. at 188. Addressing the RCRA counts, the district judge instructed:

> Each count charges the . . . Defendants, all of them, unlawfully treated, stored, or disposed of one or more hazardous wastes without the required permits.
>
> Now in order to prove a Defendant guilty of those charges, the prosecution must establish the following essential elements:
>
> First, that on or about the date charged in Counts 22 through 34, the Defendant under consideration knowingly treated, stored, or disposed of one or more of the solid wastes listed in those counts;
>
> Next, that such solid wastes were listed or identified under RCRA as hazardous wastes; and

> Third, that the wastes were treated, stored or disposed of at a location which did not have either interim status or a RCRA permit authorizing the treatment, storage or disposal of such wastes.

Id. at 192. The district judge also charged that "the Government must prove beyond a reasonable doubt that the Defendant under consideration knew that substances involved in the alleged offenses had the potential to harm others or the environment." *Id.* at 193. The district judge continued:

> Now each Defendant may be found guilty of Counts 22 through 34 of the Indictment if you find that the Government has proven the following beyond a reasonable doubt:
>
> First, that the Defendant under consideration had a responsible relationship to the violation-that is, that it occurred under his area of authority and supervisory responsibility;
>
> Second, that the Defendant had the power or the capacity to prevent the violation; and
>
> Third, that the Defendant acted knowingly in failing to prevent, detect or correct the violation.

Id. at 200-01. Randall's counsel renewed the objection that the instruction as to Count 34 was erroneously included because it could not be based on constructive knowledge.

Id. at 207.

We have held that a defendant's "knowledge [as to whether a site has a permit or the disposal of hazardous waste] does not require certainty, and the jurors may draw inferences from all of the circumstances, including the existence of the regulatory scheme." *United States v. Hayes Int'l Corp.*, 786 F.2d 1499, 1505 (11th Cir. 1986) (reviewing a conviction under 42 U.S.C. § 6928(d))(l)). As to Count 34, RCRA's knowing endangerment provision also requires proof

that the hazardous waste violation placed persons in "imminent danger of death or serious bodily injury" and that the defendant had knowledge of that danger. 42 U.S.C. § 6928(e). Because the instructions clearly set forth that a finding of "acted knowingly" was required for a conviction, there was no error in the instruction.

5. Wastewater Treatment System

Hansen contends that the instructions allowed the jury to convict him under the CERCLA release offenses without a finding that he knew the quantity of the materials released or was meaningfully in charge at the time of the release. Taylor argues that, because the instruction failed to include the definition of "tank," it allowed the jury to consider the cellroom as a part of the wastewater treatment system. In his request for a charge as to Counts 35 through 40, Hansen asked that the jury be instructed that it could not convict him unless he was the person in charge at the time of the release and knew that the released hazardous materials exceeded the applicable reportable quantity. R4-98, Request to Charge No. 23.[38]

The district judge instructed the jury:

> Now Counts 35 through 41 charge the Defendants, Mr. Christian Hansen and Mr. Taylor with violations of

---

[38] Specifically, Hansen requested that the charge read:

> *First*, that on the date alleged in each respective count, Christian Hansen was a "person in charge of a facility," as that term is defined by law;
>
> . . .
>
> *Fourth*, that Mr. Hansen (1) knew that the described release had occurred, (2) knew that the wastewater released contained a reportable quantity of mercury, and (3) knew that the release was not allowed by any federal permit.

R4-98 at Charge 23.

the Comprehensive Environmental Response, Compensation, and Liability Act, which is known by the acronym CERCLA, which requires the immediate reporting of the release of a reportable quantity of a hazardous substance into the environment.

. . .

To establish a violation of this Act, as alleged in Counts 35 through 41, the Government must prove the following elements beyond a reasonable doubt as to each Defendant:

First, that the Defendant was one of the "persons in charge" of a facility;

With respect to Counts 35 to 40, that a reportable quantity of mercury contaminated wastewater-that is, more than one pound of wastewater contaminated with mercury and other hazardous substances-was released into the environment within a 24 hour period;

As to count 41, that a reportable quantity of chlorine-that is, in excess of 10 pounds-was released into the environment within a 24 hour period; and

That the Defendant under consideration failed to notify immediately the National Response Center of the release of such materials as soon as he had knowledge of the release.

CERCLA's reporting requirements are not extended to all employees involved in a release. The reporting requirements apply to any person-even if of relatively low rank-who was in a position to detect, prevent, and abate a release of the hazardous substances.

. . .

A "person in charge's" control over a facility need not be sole or exclusive. There may be several "persons in

> charge" of the same facility. It is only necessary that the individual have or share such control of the facility where the release occurred.

R22-201-02.

In clarifying the definition of "operator" under CERCLA, the Supreme Court instructs that "an operator is simply someone who directs the workings of, manages, or conducts the affairs of a facility... specifically related to pollution, that is operations having to do with the leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations." *United States v. Bestfoods*, 524 U.S. 51, 66-67, 118 S. Ct. 1876, 1887 (1998). The district court's instructions required that the jury find that the defendant under consideration knew of the release and knew that the release contained hazardous waste, and failed to report it.

There is no indication in the record that Taylor requested an instruction on the definition of "tank." Hansen requested an instruction on the existence of the wastewater treatment exemption to the 90-day labeling and disposal period.[39] R22-68-69. The judge subsequently included such an instruction:

> Tanks which are part of a wastewater treatment system that is subject to regulation under the CWA need not have a RCRA permit so long as they are used for the treatment of wastewater. Therefore, wastewater which

---

[39] Hansen's counsel explained that he "just want[ed] the jury to understand that if the water is handled through the wastewater system, it's exempt from the ninety-day labeling and all these other things." R22-69. The government counsel responded: "If it's in a tank. It needs to be clear that if it's in a tank and it can be treated in a wastewater system-." *Id.* The district judge asked that the language be provided to him in writing, and Hansen's counsel agreed to do so. *Id.*

> is being held temporarily in such tanks is not subject to these RCRA permitting requirements.

Id. at 199.

A "tank" is defined by the regulations as "a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g. wood, concrete, steel, plastic) which provide structural support." 40 C.F.R. § 260.10. Although Taylor maintains that the instruction would have helped the jury understand that the cellroom was a tank and part of the wastewater system, the evidence showed that the berms, used in the cellroom to contain the wastewater, were constructed of dirt. R19-256. Taylor neither requested a definition of "tank" in the instructions nor was prejudiced by the failure to of the court to provide it.

D. *Sentencing Guidelines*

We review the district court's factual findings for clear error and its application of the law to those facts *de novo*. *United States v. Quinn*, 123 F.3d 1415, 1424 (11th Cir. 1997).

1. Downward Departure

a. Christian Hansen

Hansen argues that the district court erred by concluding that it lacked the authority to depart under U.S.S.G. § 5K2.0. He maintains that, at a minimum, the district court was ambiguous as to whether it believed that it had the authority to grant a downward departure and that any ambiguity must be resolved in his favor.[40]

---

[40] Amicus curiae The Washington Legal Foundation also raises the issue that Hansen's sentence must be vacated because the environment sentencing laws were unlawfully promulgated and impose patently unreasonable sentences. However, this issue was not considered before the district court and will not be considered on appeal. *United States v.*

At sentencing, Hansen argued, *inter alia*, that he should be granted a downward departure pursuant to U.S.S.G. § 5K2.0 because the factors of the case took it outside of the heartland of cases to which the guidelines apply. R13-5-8. He argued that a departure was warranted because the government agencies monitored and knew of the environmental violations, and that this situation was not where Congress intended to impose the high penalties for environmental violations. *Id.* at 6. After sentencing Hansen, the district judge stated that he "d[id] not really find any actual basis for a departure from the guidelines, even though I might, if I had discretion, found otherwise." *Id.* at 52.

We "generally may not review the merits of a district court's refusal to grant a downward departure, [but] may conduct a *de novo* review of a defendant's claim that the district court mistakenly believed it lacked the authority to grant such a departure." *United States v. Mignott*, 184 F.3d 1288, 1290(11th Cir. 1999) (per curiam). Where the district court expresses ambivalence about its authority to depart from the guidelines, we review the record to determine the district court's understanding. *See United States v. Webb*, 139 F.3d 1390, 1394-95 (11th Cir. 1998) (noting that "our independent review of the sentencing transcript reveals that the sentencing judge, at the very least, was bewildered and ambivalent as to whether the guidelines authorized a downward departure" and that "on balance, . . . the record more strongly suggests that the court believed that it was not authorized to depart downward."). If there is no indication that the district court misapprehended its authority, "we assume that the sentencing court understood it had authority to depart downward." *United States v. Chase*, 174 F.3d 1193, 1195 (11th Cir. 1999).

Allegheny-Ludlum Indus., 517 F.2d 826, 840 n. 13 (5th Cir. 1975) (noting that it would not consider issues briefed by amicus curiae which were not raised in the district court).

Hansen was sentenced after Randall. During Randall's sentencing hearing, the district judge acknowledged his authority to depart. R9-9. Hansen's sentencing transcript shows that the district judge permitted extensive discussion of whether the circumstances of Hansen's case were outside the heartland of cases to which the guidelines had been applied, and that neither party argued that the district court lacked the authority to depart downward. There is nothing in the record that shows that the district court misapprehended its authority to depart downward. Therefore, we assume the sentencing court understood its discretionary authority to grant a downward departure but decided not to exercise that authority. *Id.* at 1195. Because the district court understood that it had the authority to depart, we are unable to review the district court's denial of Hansen's request for a downward departure.

b. Randall Hansen

Randall contends that the district court erred in not granting his requests for a downward departure under §§ 5K2.0 and under 5K2.1 1. As to a departure under § 5K2.0, he argues that his case fell outside the heartland of other environmental prosecutions and that he was at all times operating under the authority of the U.S. Bankruptcy Court and upon the advice of his environmental counsel. As to a departure under § 5K2.11, he maintains that the district court erred in concluding that financial factors were not a "perceived greater harm" which could trigger a departure and in not understanding that the record supported his belief that a greater environmental, as well as economic, harm would occur at the site and in the community if the plant failed to remain operational.[41]

---

[41] Randall also argues that the sentencing guidelines, as applied to environmental crimes, are arbitrary and were unlawfully promulgated. Randall did not raise this issue at the sentencing hearing but addressed it

At Randall's sentencing, the district judge stated:

> [T]he Court acknowledges that it does have authority to depart from the guidelines pursuant to [§§ 5K2.0 and 5K.211] if it finds that the circumstances of this case warrant such a departure.[42]

---

in a supplemental memorandum in aid of sentencing. R9-228-8. Randall's sentencing hearing initially commenced on 2 June 1999, and was continued on 1 July 1999. On 1 July 1999, the hearing was called to order at 10:01 AM, and recessed at 10:24 AM. The supplemental memorandum is not referenced at the sentencing hearing and was filed at 12:11 PM on 1 July 1999. Therefore, it does not appear that this was considered by the district court. Because the issue was not considered by the district court, it will not be considered by this court. *Fed. Deposit Ins. Corp. v. Verex Assurance Inc.*, 3 F.3d 391, 395 (11th Cir. 1993).

[42] It appears that, although the district judge did not find that the circumstances warranted a departure, he nonetheless considered Randall's arguments. During the hearing, the district judge continued:

> As to the Defendant's arguments concerning lesser harm, I'm not particularly impressed with that. For the Court to consider a departure under this section [§5K2.11], the Court would have to find either that the Defendant committed the crime in order to avoid perceived greater harm or that the Defendant's conduct does not cause or threaten the harm or evil sought to be prevented by the laws prohibiting the offenses at issue.
>
> Now as to that first prong, the Defendant has failed to produce evidence, other than his own statement, that closing the LCP plant would have caused a greater harm than allowing it to continue operating in the unsafe manner. His argument, as I understood it, is based upon financial reasons. As I recall, he stated that there was compelling societal interest in keeping the plant open and its three hundred employees working.
>
> While sympathetic to the plight of the employees who would have, and eventually did, lose their jobs, that does not, and I do not believe that it justifies subjecting the employees and the community to the risk of operating an unsafe chlor-alkali plant.

R9-9. He set forth the requirements for a departure under the guidelines, but found that no departure was warranted under either provision.

We may not review a district court's refusal to grant a downward departure unless the court mistakenly believed that it lacked the authority to grant such a departure. *Mignott*, 184 F.3d at 1290. Despite Randall's argument to the contrary, the

---

> The Court finds that financial factors are not a perceived greater harm. And, therefore, no downward departure is warranted in that instance.
>
> As to the second prong, the guidelines permit a downward departure where the conduct may not cause or threaten the harm or evil sought to be prevented by the law prescribing the offense at issue.
>
> The environmental laws for which the Defendant was convicted were enacted to protect human life in the environment. Therefore, the Defendant's conduct was the type of conduct which the environmental laws sought to prevent. And as such, the Court finds that the circumstances of this offense do not warrant a downward departure under 5K2.11 of the guidelines.

R14-9-11.

As to the request for a departure under § 5K2.0, he stated:

> [I]n order for the Court to find that the Defendant's case falls outside the heartland, the Court has to find that this is an unusual case where there is something atypical about the Defendant or the circumstances surrounding the commission of the crime. I simply cannot make such a finding.
>
> I find that the circumstances of these offenses are those contemplated by the Sentencing Commission in the formulation of the guidelines. And farther, I find that there are no factors which take this case outside the heartland of the environmental guidelines. Accordingly, the Court finds that no departure is warranted under 5K2.0 of the guidelines.

Id. at 11.

district judge indicated his understanding that financial factors could be a "perceived greater harm" by weighing the harms associated with closing the plant and putting 300 employees out of work against keeping the plant open as an unsafe chlor-alkali plant and keeping the employees working, but found that the financial factors were not a harm greater than the harms associated with the operation of an unsafe chlor-alkali plant. R14-9-11. Because the district court acknowledged that it had the authority to depart, we lack the jurisdiction to review the decision.

c. Taylor

Taylor also argues that the district court erred by not granting him a downward departure under §§ 5K2.0 and 5K2.11. As to the request for a departure under § 5K2.0, he maintains that his case fell outside the heartland of environmental cases. As to the request for a departure under § 5R2.11, he contends that he believed that closing the plant would cause a greater environmental harm that continuing operations.

Taylor presented each of his issues at sentencing.[43] R12-20-21. The district judge asked the probation officer to comment on Taylor's requests for a departure, and to specifically address Taylor's cooperation during the cleanup efforts. *Id.* at 21-22. The probation officer responded that

---

[43] Taylor adopted Hansen's arguments for a departure, but added that, as to the request for a departure under § 5K2. 11, that they had "prevented a greater harm from merely shutting down the plant without the proper decommissioning" based on their belief that "these problems, maintenance problems, could be addressed, the jobs could be saved, and the business could continue." R12-20-21. He "also call[ed] the Court's attention . . . to Mr. Taylor's conduct following the decommissioning of the plant." *Id.*

there were no grounds for a downward departure. [44] *Id.* at 41. The district judge commented:

> I am equally bound by the guidelines and by the law. And I do not have much discretion.
>
> . . .
>
> And I just cannot find a basis for departure under the guidelines, inasmuch as the facts as found are of the kind contemplated by the Sentencing Commission.

Id. at 42-43.

Because there is nothing in the record that indicates that the district court misapprehended its authority to depart downward, we assume that the district court understood its authority to depart and decided not to exercise its discretionary authority. Therefore, we lack jurisdiction to address the district court's decision not to depart.

III. CONCLUSION

After reviewing the record and carefully considering the briefs and oral argument, we conclude that the defendants' convictions are supported by the evidence, and that the district court did not err in the evidentiary rulings, the jury instructions, or at sentencing. Accordingly, we AFFIRM.

---

[44] The probation officer noted that Taylor's cooperation should not be a factor since he was a contract, paid employee. *Id.* at 24. In response to Taylor's argument that "there's a lesser harm in keeping somebody employed than dumping hundreds of thousands of gallons of contaminated water into a marsh," he commented that "there was a tremendous amount of harm done to the environment. . . They're not looking at the effects. . . . [The] area was closed off by the Georgia Environmental Protection department because the fish and the seafood in there w[ere] contaminated. We will never know what damage this has all done." *Id.* At 40.

APPENDIX B

IN THE UNITED STATES COURT OF APPEALS
FOR THE ELEVENTH CIRCUIT

[Filed Oct. 26, 2001]

No. 99-11638-DD

UNITED STATES OF AMERICA,
Plaintiff-Appellee,

versus

CHRISTIAN A. HANSEN,
ALFRED R. TAYLOR,
RANDALL W. HANSEN,
Defendants-Appellants.

On Appeal from the United States District Court
for the Southern District of Georgia

ON PETITION(S) FOR REHEARING AND PETITION(S) FOR REHEARING EN BANC (Opinion _____, 11th Cir., 19___, _____ F.2d _____).

Before: BIRCH and DUBINA, *Circuit Judges*, and HANCOCK*, *District Judge*.

PER CURIAM:

The Petition(s) for Rehearing are DENIED and no member of this panel nor other Judge in regular active service on the Court having requested that the Court be polled on rehearing

---

* Honorable James H. Hancock, U.S. District Judge for the Northern District of Alabama, sitting by designation.

en banc (Rule 35, Federal Rules of Appellate Procedure; Eleventh Circuit Rule 35-5), the Petition(s) for Rehearing En Banc are DENIED.

ENTERED FOR THE COURT:

/s/ _____
UNITED STATES CIRCUIT JUDGE

ORD-42
(6/95)

APPENDIX C

IN THE UNITED STATES COURT OF APPEALS
FOR THE ELEVENTH CIRCUIT

[Filed Nov. 20, 2001]

No. 99-11638-DD

UNITED STATES OF AMERICA,
Plaintiff-Appellee,

versus

CHRISTIAN A. HANSEN,
ALFRED R. TAYLOR,
RANDALL W. HANSEN,
Defendants-Appellants.

On Appeal from the United States District Court
for the Southern District of Georgia

ORDER:

( ) The motion of Appellants, Randall and Christian Hansen, for (x) stay ( ) recall and stay of the issuance of the mandate pending petition for writ of certiorari is DENIED.

(X) The motion of Appellant, Randall and Christian Hansen, for (x) stay ( ) recall and stay of the issuance of the mandate pending petition for writ of certiorari is GRANTED to and including *January 24, 2002*, the stay to continue in force until the final disposition of the case by the Supreme Court, provided that within the period above mentioned there shall be filed with

the Clerk of this Court the certificate of the Clerk of the Supreme Court that the certiorari petition has been filed. The Clerk shall issue the mandate upon the filing of a copy of an order of the Supreme Court denying the writ, or upon expiration of the stay granted herein, unless the above mentioned certificate shall be filed with the Clerk of this Court within that time.

( ) The motion of Appellant, Randall and Christian Hansen, for a further stay of the issuance of the mandate is GRANTED to and including _____, under the same conditions as set forth in the preceding paragraph.

( ) *IT IS ORDERED* that the motion of Appellant, Randall and Christian Hansen, for a further stay of the issuance of the mandate is DENIED.

/s/ Stanley F. Birch
STANLEY F. BIRCH
UNITED STATES CIRCUIT JUDGE

ORD-45

APPENDIX D

Resource Conservation and Recovery Act
42 U.S.C. § 6928(d), (e), and (f)

(d) Criminal penalties

Any person who—

(1) knowingly transports or causes to be transported any hazardous waste identified or listed under this subchapter to a facility which does not have a permit under this subchapter, or pursuant to title I of the Marine Protection, Research, and Sanctuaries Act (86 Stat. 1052) [33 U.S.C. § 1411 et seq.],

(2) knowingly treats, stores, or disposes of any hazardous waste identified or listed under this subchapter—

(A) without a permit under this subchapter or pursuant to title I of the Marine Protection, Research, and Sanctuaries Act (86 Stat. 1052) [33 U.S.C. § 1411 *et seq.*]; or

(B) in knowing violation of any material condition or requirement of such permit; or

(C) in knowing violation of any material condition or requirement of any applicable interim status regulations or standards;

(3) knowingly omits material information or makes any false material statement or representation in any application, label, manifest, record, report, permit, or other document filed, maintained, or used for purposes of compliance with regulations promulgated by the Administrator (or by a State in the case of an authorized State program) under this subchapter;

(4) knowingly generates, stores, treats, transports, disposes of, exports, or otherwise handles any hazardous waste or any used oil not identified or listed as a hazardous waste under this subchapter (whether such

activity took place before or takes place after November 8, 1984) and who knowingly destroys, alters, conceals, or fails to file any record, application, manifest, report, or other document required to be maintained or filed for purposes of compliance with regulations promulgated by the Administrator (or by a State in the case of an authorized State program) under this subchapter;

(5) knowingly transports without a manifest, or causes to be transported without a manifest, any hazardous waste or any used oil not identified or listed as a hazardous waste under this subchapter required by regulations promulgated under this subchapter (or by a State in the case of a State program authorized under this subchapter) to be accompanied by a manifest;

(6) knowingly exports a hazardous waste identified or listed under this subchapter (A) without the consent of the receiving country or, (B) where there exists an international agreement between the United States and the government of the receiving country establishing notice, export, and enforcement procedures for the transportation, treatment, storage, and disposal of hazardous wastes, in a manner which is not in conformance with such agreement; or

(7) knowingly stores, treats, transports, or causes to be transported, disposes of, or otherwise handles any used oil not identified or listed as a hazardous waste under this subchapter—

(A) in knowing violation of any material condition or requirement of a permit under this subchapter; or

(B) in knowing violation of any material condition or requirement of any applicable regulations or standards under this chapter;

shall, upon conviction, be subject to a fine of not more than $50,000 for each day of violation, or imprisonment not to exceed two years (five years in the case of a

violation of paragraph (1) or (2)), or both. If the conviction is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment under the respective paragraph shall be doubled with respect to both fine and imprisonment.

(e) Knowing endangerment

Any person who knowingly transports, treats, stores, disposes of, or exports any hazardous waste identified or listed under this subchapter or used oil not identified or listed as a hazardous waste under this subchapter in violation of paragraph(1), (2), (3), (4), (5), (6), or (7) of subsection (d) of this section who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment for not more than fifteen years, or both. A defendant that is an organization shall, upon conviction of violating this subsection, be subject to a fine of not more than $1,000,000.

(f) Special rules

For the purposes of subsection (e) of this section—

(1) A person's state of mind is knowing with respect to—

(A) his conduct, if he is aware of the nature of his conduct;

(B) an existing circumstance, if he is aware or believes that the circumstance exists; or

(C) a result of his conduct, if he is aware or believes that his conduct is substantially certain to cause danger of death or serious bodily injury.

(2) In determining whether a defendant who is a natural person knew that his conduct placed another person in imminent danger of death or serious bodily injury—

(A) the person is responsible only for actual awareness or actual belief that he possessed; and

(B) knowledge possessed by a person other than the defendant but not by the defendant himself may not be attributed to the defendant;

Provided, That in proving the defendant's possession of actual knowledge, circumstantial evidence may be used, including evidence that the defendant took affirmative steps to shield himself from relevant information.

(3) It is an affirmative defense to a prosecution that the conduct charged was consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of—

(A) an occupation, a business, or a profession; or

(B) medical treatment or medical or scientific experimentation conducted by professionally approved methods and such other person had been made aware of the risks involved prior to giving consent.

The defendant may establish an affirmative defense under this subsection by a preponderance of the evidence.

(4) All general defenses, affirmative defenses, and bars to prosecution that may apply with respect to other Federal criminal offenses may apply under subsection (e) of this section and shall be determined by the courts of the United States according to the principles of common law as they may be interpreted in the light of reason and experience. Concepts of justification and excuse applicable under this section may be developed in the light of reason and experience.

(5) The term "organization" means a legal entity, other than a government, established or organized for any purpose, and such term includes a corporation,

company, association, firm, partnership, joint stock company, foundation, institution, trust, society, union, or any other association of persons.

(6) The term "serious bodily injury" means—

(A) bodily injury which involves a substantial risk of death;

(B) unconsciousness;

(C) extreme physical pain;

(D) protracted and obvious disfigurement; or

(E) protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

Clean Water Act
33 U.S.C. § 1319(c)

(c) Criminal penalties

(1) Negligent violations

Any person who—

(A) negligently violates section 1311, 1312, 1316, 1317, 1318, 1321(b)(3), 1328, or 1345 of this title, or any permit condition or limitation implementing any of such sections in a permit issued under section 1342 of this title by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 1342(a)(3) or 1342(b)(8) of this title or in a permit issued under section 1344 of this title by the Secretary of the Army or by a State; or

(B) negligently introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable Federal, State, or local requirements or

permits, which causes such treatment works to violate any effluent limitation or condition in any permit issued to the treatment works under section 1342 of this title by the Administrator or a State;

shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or by both.

(2) Knowing violations

Any person who—

(A) knowingly violates section 1311, 1312, 1316, 1317, 1318, 1321(b)(3), 1328, or 1345 of this title, or any permit condition or limitation implementing any of such sections in a permit issued under section 1342 of this title by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 1342(a)(3) or 1342(b)(8) of this title or in a permit issued under section 1344 of this title by the Secretary of the Army or by a State; or

(B) knowingly introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable Federal, State, or local requirements or permits, which causes such treatment works to violate any effluent limitation or condition in a permit issued to the treatment works under section 1342 of this title by the Administrator or a State;

shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by

imprisonment for not more than 3 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $100,000 per day of violation, or by imprisonment of not more than 6 years, or by both.

Conspiracy
18 U.S.C. § 371

If two or more persons conspire either to commit any offense against the United States, or to defraud the United States, or any agency thereof in any manner or for any purpose, and one or more of such persons do any act to effect the object of the conspiracy, each shall be fined under this title or imprisoned not more than five years, or both.

If, however, the offense, the commission of which is the object of the conspiracy, is a misdemeanor only, the punishment for such conspiracy shall not exceed the maximum punishment provided for such misdemeanor.

APPENDIX E

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF GEORGIA
BRUNSWICK DIVISION

CRIMINAL ACTION NO. CR298-23

UNITED STATES OF AMERICA

v.

CHRISTIAN A. HANSEN,
RANDALL W. HANSEN,
and ALFRED R. TAYLOR

COURT'S INSTRUCTIONS TO THE JURY

Members of the Jury:

It is now my duty to instruct you on the rules of law that you must follow and apply in deciding this case. When I have finished, you will go to the jury room and begin your discussions—what we call your deliberations.

It will be your duty to decide whether the Government has proved beyond a reasonable doubt the specific facts necessary to find each Defendant under consideration guilty of the crimes charged in the Indictment.

You must make your decision only on the basis of the testimony and other evidence presented here during the trial. You must not be influenced in any way either by sympathy or prejudice for or against any of the Defendants or the Government.

You must also follow the law as I explain it to you, whether you agree with that law or not. You must follow all of my instructions as a whole. You may not single out, or disregard, any of my instructions to you on the law.

The Indictment or formal charge against any Defendant is not evidence of guilt. Indeed, every Defendant is presumed by the law to be innocent. The law does not require a Defendant to prove innocence or produce any evidence at all. If a Defendant elects not to testify, you should not consider that in any way during your deliberations. The Government has the burden of proving a Defendant guilty beyond a reasonable doubt, and if it fails to do so, you must find that particular Defendant not guilty.

Thus, while the Government's burden of proof is a strict or heavy burden, it is not necessary that a Defendant's guilt be proved beyond all possible doubt. It is only required that the Government's proof exclude any "reasonable doubt" concerning a Defendant's guilt.

A "reasonable doubt" is a real doubt, based upon reason and common sense, after careful and impartial consideration of all the evidence in the case. Proof beyond a reasonable doubt, therefore, is proof of such a convincing character that you would be willing to rely and act upon it without hesitation in the most important of your own affairs.

You may not find a Defendant guilty unless you find that the inferences you draw from the evidence are consistent with the theory of his guilt and inconsistent with reasonable theories of his innocence. If you are convinced that a Defendant has been proved guilty beyond a reasonable doubt, say so with a verdict of guilty. If you are not convinced, say so with a verdict of not guilty.

As I said earlier, you must consider only the evidence that I have admitted in the case. The term "evidence" includes the testimony of the witnesses and the exhibits admitted in the

record. Remember that anything the lawyers say is not evidence in the case. It is your own recollection and interpretation of the evidence that controls. What the lawyers say is not binding upon you.

Also, you should not assume from anything that I may have said that I have any opinion concerning any of the issues in this case. Except for my instructions to you on the law, you should disregard anything I may have said during the trial in arriving at your own decision concerning the facts.

In considering the evidence, you may make deductions and reach conclusions which reason and common sense lead you to make, and you should not be concerned about whether the evidence is direct or circumstantial.

"Direct evidence" is the testimony of one who asserts actual knowledge of a fact, such as an eyewitness. "Circumstantial evidence" is proof of a chain of facts and circumstances tending to prove, or disprove, any fact in dispute. The law makes no distinction between the weight you may give to either direct or circumstantial evidence.

Now, in saying that you must consider all of the evidence, I do not mean that you must accept all of the evidence as true or accurate. You should decide whether you believe what each witness had to say, and how important that testimony was. In making that decision, you may believe or disbelieve any witness, in whole or in part. Also, the number of witnesses testifying concerning any particular dispute is not controlling.

In deciding whether you believe or do not believe any witness, I suggest that you ask yourself a few questions: Did the witness impress you as one who was telling the truth? Did the witness have any particular reason not to tell the truth? Did the witness have a personal interest in the outcome of the case? Did the witness seem to have a good memory? Did the witness have the opportunity and ability to

observe accurately the things he or she testified about? Did the witness appear to understand the questions clearly and answer them directly? Did the witness's testimony differ from other testimony or other evidence?

You should also ask yourself whether there was evidence tending to prove that a witness testified falsely concerning some important fact, or whether there was evidence that, at some other time, a witness said or did something, or failed to say or do something, which was different from the testimony the witness gave before you during the trial. If you find that a witness has testified falsely concerning any material matter, you have the right to distrust that witness's testimony concerning other matters.

You should keep in mind, of course, that a simple mistake by a witness does not necessarily mean that the witness was not telling the truth as he or she remembers it, because people naturally tend to forget some things or remember other things inaccurately. So, if a witness has made a misstatement, you need to consider whether it was simply an innocent lapse of memory or an intentional falsehood. The significance of that may depend on whether it has to do with an important fact or with only an unimportant detail.

A Defendant has a right not to testify. If a Defendant does testify, however, you should decide in the same way as that of any other witness whether you believe the Defendant's testimony.

The testimony of some witnesses may be considered with more caution than the testimony of other witnesses. It is legitimate for the attorneys to attack or question the credibility of any witness on the ground that his or her testimony may be colored by a personal or professional interest in the case.

In this case, the Government called as one of its witnesses a person named as a co-Defendant in the Indictment. The fact

that a witness has pleaded guilty to the crime charged in the Indictment is not evidence, in and of itself, of the guilt of any other person. The Government has entered into a plea agreement with that witness, providing for the possibility of a lesser sentence than that to which he would otherwise be exposed. Such "plea bargaining," as it is called, has been approved as lawful and proper, and is expressly provided for in the rules of this Court. However, a witness who hopes to gain more favorable treatment may have a reason to make a false statement because the witness wants to strike a good bargain with the Government. So, while witnesses of this kind may be entirely truthful when testifying, you should consider such testimony with more caution than the testimony of other witnesses. You may apply similar reasoning to the testimony of witnesses who have been promised immunity from prosecution.

When knowledge of a technical subject matter might be helpful to the jury, a person having special training or experience in that technical field is permitted to state an opinion concerning those technical matters. Merely because an expert witness has expressed an opinion, however, does not mean that you must accept that opinion. The same as with any other witness, it is up to you to decide whether to rely upon it.

There have been admitted in evidence certain exhibits variously referred to as schedules or summaries. Strictly speaking, the exhibits are not actual evidence, but they were admitted as summaries of other evidence in the case and they are admitted only for your assistance and convenience in considering the other evidence which they purport to summarize.

Exhibits of this nature are permitted where they are based upon voluminous records or documents already in evidence, in order to assist you in determining the ultimate facts or results shown by such records and documents.

But you are reminded that it is the records, and documents which are the evidence, and the summaries are admitted only to assist you in considering that evidence. For this purpose, you are entitled to consider them.

The guilt of a Defendant in a criminal case may be proved without evidence that the Defendant personally did every act involved in the commission of the crime charged. The law recognizes that, ordinarily, anything a person can do for one's self may also be accomplished through direction of another person as an agent, or by acting together with, or under the direction of, another person or persons in a joint effort.

So, if the acts or conduct of an agent, employee, or other associate of the Defendant are willfully directed or authorized by the Defendant, or if the Defendant aids and abets another person by willfully joining together with that person in the commission of a crime, then the law holds the Defendant responsible for the conduct of that other just as though the Defendant had personally engaged in such conduct.

A Defendant is responsible for acts he performs or causes to be performed on behalf of a corporation, just as though that act were performed on his own behalf.

However, a Defendant who is an officer, director, employee, or agent of a corporation is not criminally responsible for the illegal acts of another officer, director, employee, or agent performed on behalf of that corporation merely because of his status as an officer, director, employee, or agent of the corporation.

Before any Defendant can be held criminally responsible for the conduct of others it is necessary that the Defendant willfully associate in some way with the crime, and willfully participate in it. Mere presence at the scene of a crime and even knowledge that a crime is being committed are not sufficient to establish that a Defendant either directed or

aided and abetted the crime. You must find beyond a reasonable doubt that the Defendants were willful participants and not merely knowing spectators.

It is your duty to give separate, personal consideration to each individual Defendant. When you do so, you should analyze what the evidence in the case shows with respect to that individual, leaving out of consideration entirely any evidence admitted solely against another Defendant or Defendants. Each Defendant is entitled to have his case determined from evidence as to his own acts and statements and conduct, as well as any other evidence in the case which may be applicable to him.

At this time, I will explain the Indictment, which charges 42 separate offenses, called "Counts." I will not read it to you at length because you will be given a copy of the Indictment for reference during your deliberations.

As it is used in these instructions, the term "LCP plant" means LCP Chemical Company's chlor-alkali production facility in Brunswick, Georgia.

Conspiracy Charge

Count One of the Indictment charges that the Defendants, Christian Hansen, Randall W. Hansen, and Alfred R. Taylor, knowingly and willfully conspired together:

A. to knowingly discharge pollutants from the outfall weir of the LCP plant in violation of the NPDES permit—that is, to knowingly discharge mercury and chlorine in quantities that exceeded the limits contained in the permit, and to knowingly discharge waste-water that violated the pH parameters contained in the permit into Purvis Creek, all in violation of the Clean Water Act;

B. to knowingly dispose of and store hazardous wastes without a RCRA permit; that is, to dispose of waste

mercury, mercury contaminated brine muds, mercury contaminated wastewater, caustic wastewater, mercury contaminated residue from caustic filter backwash, mercury contaminated solids, and wastewater treatment sludge into and on the land without a permit and also to store such wastes without a permit at various locations at the LCP plant, all in violation of the Resource Conservation and Recovery Act, or RCRA;

C. to knowingly endanger other persons through the unpermitted treatment, storage, and disposal of hazardous wastes; to knowingly fail to notify immediately the appropriate regulatory authorities upon receiving knowledge of the release of a reportable quantity of a hazardous substance, including chlorine gas, sodium hypochlorite bleach, mercury contaminated wastewater, and caustic wastewater with a pH value of 12.5 or greater, into the environment, all in violation of the Comprehensive Environment Response, Compensation, and Liability Act, or CERCLA; and

D. to defraud the United States by impeding, impairing, obstructing, and defeating the lawful functions of the EPA and the United States Occupational Safety and Health Administration (OSHA).

Title 18, United States Code, Section 371, makes it a separate Federal crime or offense for anyone to conspire or agree with someone else to do something which, if actually carried out, would amount to another Federal crime or offense. So, under this law, a "conspiracy" is an agreement or a kind of partnership in criminal purposes in which each member becomes the agent or partner of every other member.

In order to establish a conspiracy offense, it is not necessary for the Government to prove that all of the people named in the Indictment were members of the scheme, or that those who were members had entered into any formal type of agreement, or that the members had planned together all of

the details of the scheme or the "overt acts" that the Indictment charges would be carried out in an effort to commit the intended crime.

Also, because the essence of a conspiracy offense is the making of the agreement itself, followed by the commission of any overt act, it is not necessary for the Government to prove that the conspirators actually succeeded in accomplishing their unlawful plan.

What the evidence in the case must show beyond a reasonable doubt is:

First: that two or more persons, in some way or manner, came to a mutual understanding to try to accomplish a common and unlawful plan, as charged in the Indictment;

Second: that the Defendants, knowing the unlawful purpose of the plan and intending to further its accomplishments willfully joined in it;

Third: that one of the conspirators, during the existence of the conspiracy, knowingly committed at least one of the overt acts described in the Indictment; and

Fourth: that such overt act was knowingly committed at or about the time alleged in an effort to carry out or accomplish some object of the conspiracy.

An "overt act" is any transaction or event, even one which may be entirely innocent when considered alone, but which is knowingly committed by a conspirator in an effort to accomplish some object of the conspiracy.

If a Defendant enters into a conspiracy agreement but later has a change of mind and withdraws from that agreement before anyone has committed an overt act, as previously

defined, then the crime was not complete at that time and the Defendant who withdrew cannot be convicted. That Defendant would be not guilty of the alleged conspiracy offense.

However, in order for you to decide that a Defendant withdrew from a conspiracy, you must find that the Defendant took affirmative action to disavow or defeat the purpose of the conspiracy. As just explained, the Defendant must have taken such action before any member of the scheme had committed any overt act.

A person may become a member of a conspiracy without knowing all of the details of the unlawful scheme, and without knowing who all of the other members are. So, if you find that a Defendant has a general understanding of the unlawful purpose of the plan and knowingly and willfully joins in that plan on even one occasion, you may convict that Defendant for conspiracy even though that Defendant did not participate before, and even though that Defendant played only a minor part.

A Defendant who has been found guilty of conspiracy may then be found guilty for reasonably foreseeable acts or offenses committed by co-conspirators during the time that the Defendant under consideration was a knowing, willful member of the conspiracy.

Of course, mere presence at the scene of a transaction or event, or the mere fact that certain persons may have associated with each other, and may have assembled together and discussed common aims and interests, does not necessarily establish proof of a conspiracy. Also, a person who has no knowledge of a conspiracy, but who happens to act in a way which advances some purpose of one, does not thereby become a conspirator. To convict a Defendant for conspiracy, you must be convinced beyond a reasonable doubt that the Defendant intended to accomplish the unlawful purpose of the conspiracy.

With respect to the conspiracy count, the term "willfully" means voluntarily and purposely, with specific intent or purpose to do something that the law forbids. You may consider the evidence of a Defendant's acts and words, along with all the other evidence, in deciding whether a Defendant acted willfully.

With respect to the remaining counts, the Government must prove that each Defendant under consideration acted knowingly. A person acts knowingly if he acts intentionally and voluntarily, realizing what he is doing, and not because of ignorance, mistake, accident, or carelessness. Whether a Defendant acted knowingly may be proven by the Defendant's conduct and by all of the facts and circumstances surrounding the case.

It is not necessary for the Government to prove that a Defendant knew that a particular act or failure to act was a violation of law or that a Defendant had any specific knowledge of the particular regulatory limits imposed under the Clean Water Act (CWA), or the Comprehensive Environmental Response Compensation and Lability Act (CERCLA), or the Resource Conservation and Recovery Act (RCRA).

With regard to the conspiracy alleged in this case, the Indictment charges that the Defendants conspired to commit numerous separate, substantive crimes or offenses.

In such a case, it is not necessary for the Government to prove that the Defendant under consideration willfully conspired to commit all of those substantive offenses. It is sufficient for conspiracy if the Government proves, beyond a reasonable doubt, that the Defendant under consideration willfully conspired with someone to commit *one* of those offenses. But, in that event, in order to return a verdict of guilty on the conspiracy count, you must unanimously agree upon which of the offenses the Defendant conspired to commit.

Clean Water Act Charge

Counts 2 through 21 of the Indictment charge the Defendants with violations of the Clean Water Act, Title 33, United States Code, Section 1319(c)(2). Section 1319(c)(2) provides that any person who knowingly violates any permit condition or limitation, in a permit issued pursuant to the National Pollutant Discharge Elimination System, or "NPDES," is guilty of an offense against the United States.

In other words, any person who knowingly discharges pollutants in violation of the conditions or in excess of the limits of a NPDES permit has committed an offense against the United States.

In order to prove a Defendant guilty of violating the Clean Water Act as charged in Counts 2 through 21, the Government must establish the following elements:

(1) that on or about the date set forth in the Indictment, the Defendant under consideration knowingly:

(2) violated, or caused to be violated, a permit condition

(3) set forth in a NPDES permit:

A. For counts 2 through 9, that mercury in excess of the daily average discharge limit allowed by the permit was discharged.

B. For counts 10 through 15, that mercury in excess of the daily maximum discharge limit allowed by the permit was discharged.

C. For counts 16 through 21, that chlorine in excess of the daily maximum discharge limit allowed by the permit was discharged.

The term "knowingly," as I stated, is applicable to each element of the offense. The term "discharge of a pollutant" is

defined in the Clean Water Act as any addition of any pollutant from any point source to navigable waters of the United States.

The law provides that the term "pollutant" includes solid waste, chemical wastes, and industrial waste discharged into waters of the United States.

The term "point source" is defined in the Clean Water Act to mean any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure or container . . . from which pollutants are or may be discharged."

The term "waters of the United States" includes:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; and
2. All other waters including any such waters from which fish or shellfish are or could be taken and sold in interstate or foreign commerce;
3. Wetlands adjacent to waters otherwise identified as waters of the United States.

Under the federal Clean Water Act, the definition of "person" specifically includes corporations and individual corporate officers. You are instructed that the Defendants, Christian A. Hansen, Randall W. Hansen, and Alfred R. Taylor are persons for purposes of the Clean Water Act.

Resource Conservation and Recovery Act Charge

Counts 22 through 34 of the Indictment charge the Defendants with violating the Resource Conservation and Recovery Act (RCRA), Title 42, United States Code, the federal statute which regulates the treatment, storage, and disposal of hazardous wastes. Alfred R. Taylor is not charged with Count 33. Each count charges that the Defendants

unlawfully treated, stored, or disposed of one or more hazardous wastes without the required permits. In order to prove a Defendant guilty of these charges, the prosecution must establish the following essential elements:

First: that on or about the date charged in Counts 22 through 34, the Defendant under consideration knowingly treated, stored, or disposed of one or more of the solid wastes listed in those counts;

Second: that such solid wastes were listed or identified under RCRA as hazardous wastes; and

Third: that the wastes were treated, stored or disposed of at a location which did not have either interim status or a RCRA permit authorizing the treatment, storage, or disposal of such wastes:

A. For Counts 22 and 23, by placing hazardous wastes on the floor of Cellroom #1 at the LCP plant, which had holes and cracks such that the wastes flowed onto the land and into the groundwater.

B. For Counts 24 and 25, by placing hazardous wastes on the floor of Cellroom #2 at the LCP plant.

C. For Counts 26 through 32, by causing hazardous wastes to flow out of Cellroom #2 at the LCP plant and onto the land near the southwest corner of that building.

D. For Count 33, by storing hazardous wastes in tanks in Bunker C at the LCP plant. (The Defendant, Alfred Taylor, is not charged with Count 33).

E. For Count 34, by treating, storing, and disposing of hazardous wastes at the LCP plant while knowing that such conduct placed Hanlin employees and other persons in imminent danger of death or serious bodily injury.

In order for you to find a Defendant guilty of Counts 22 through 34, the Government must initially prove that such Defendant under consideration knowingly treated, stored, or disposed of at least one hazardous waste listed in that Count of the Indictment, at a facility which did not have either a permit or interim status.

A person who submits a Part A RCRA permit application has interim status, which means he can operate the unit listed on the Part A application until such time as a final permit is issued.

The Government must prove beyond a reasonable doubt that the Defendant under consideration knew that substances involved in the alleged offenses had the potential to harm others or the environment. However, the Government need not establish that such Defendant knew that those chemicals were, or identified by law as, hazardous waste or that such Defendant knew that he was required to obtain a permit before treating, storing or disposing of the substances. It is not necessary for the Government to prove that the Defendant under consideration knew a particular act or failure to act was a violation of law or that such Defendant acted with any federal law in mind.

The term "imminent danger" as it is used in these instructions means danger that is substantially certain to occur. Thus, the burden is on the Government to establish beyond a reasonable doubt that the Defendant under consideration created a danger which made it substantially certain that another person would suffer serious bodily injury or death. A

mere possibility that someone would suffer serious bodily injury or death is not enough.

The Government is not required to establish that the Defendant under consideration intended or desired any harm to another person. However, in addition to finding that such Defendant placed another person in imminent danger of death or serious bodily injury, you must also find that the Defendant was actually aware or actually believed that his conduct was substantially certain to cause danger of death or serious bodily injury. A Defendant is only responsible for his own actual awareness or actual belief. Another person's knowledge of the danger or knowledge that the Defendant should have had or could have had under other circumstances does not suffice and cannot be attributed to the Defendant under consideration. The Defendant may not, however, affirmatively shield himself from knowledge. You may treat such deliberate avoidance of positive knowledge as the equivalent of knowledge.

It is not necessary for the Government to prove that death or serious bodily injury actually occurred. The Government must prove only that the Defendant under consideration knew that his actions were substantially certain to place someone in imminent danger of death or serious bodily injury by creating a condition which could reasonably be expected to cause death or serious physical harm. While the danger must be an immediate result of the conduct, the existing danger may involve a harm which may not ultimately ripen into death or serious bodily injury for a long time, if at all.

RCRA provides specific standards and terms that must be employed in determining whether a Defendant knowingly endangered any person. The statute provides that a Defendant:

First: knows of his conduct, if he is aware of the nature of conduct;

Second: knows of an existing circumstance, if he is aware or believes that the circumstance exists; or

Third: knows of a result of his conduct, if he is aware or believes that his conduct is substantially certain to cause danger of death or serious bodily injury.

RCRA provides that the term "serious bodily injury" means:

A. bodily injury which involves a substantial risk of death;

B. unconsciousness;

C. extreme physical pain;

D. protracted and obvious disfigurement; or

E. protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

Regarding Count 34, if you find by a preponderance of the evidence, that is, if you find it more likely than not, that the persons endangered were employees of the LCP plant, that they consented to the conduct of the Defendant under consideration and that the danger was a reasonably foreseeable hazard of working at the LCP plant, you may not find the Defendant under consideration guilty of endangerment.

The term "hazardous waste," as used in RCRA, includes any refuse and other discarded, abandoned, or disposed of material resulting from industrial, commercial operations, which EPA and the State of Georgia have identified or listed is a hazardous waste.

A "solid waste" 'is any garbage, refuse, sludge, or any other waste material including oil, liquid, semi-solid, or contained gaseous material, that:

A. is discarded, abandoned or disposed of; or

B. is being accumulated, stored, or physically, chemically or biologically treated before being discarded; or

C. has served its original intended use and is sometimes discarded.

A material is "discarded" if it is:

A. disposed of;

B. burned or incinerated after having served its original intended use; or

C. physically, chemically, or biologically treated in lieu of or before being disposed of.

The term "disposal" as used in Counts 22, 23, and 26 through 32 of the Indictment means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste into or on any land or water so that such hazardous waste or any part thereof may enter the environment or be emitted into the air, or discharged into any water, including ground waters.

However, the Government is not required to establish that the waste in question actually entered the environment, was emitted into the air, or discharged into water. It is sufficient for the Government to prove that the hazardous waste was placed into or on land in such a manner that it *could* enter the environment, air, or water, including ground water.

The term "storage" as used in the Indictment means the containment of hazardous waste, either on a temporary basis or for a period of time, in such a manner as not to constitute

disposal of such hazardous waste, at the end of which period the hazardous waste is to be treated, disposed of, or stored elsewhere.

The term "treatment," as used in the Indictment, means any method, technique, or process, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, render the waste nonhazardous or less hazardous, or to make the waste safer to transport, store, or dispose of, or to make the waste more amenable for recovery or storage.

The term "generator" means any person whose act or process at a particular site produces hazardous waste. A generator may not store hazardous waste for longer than 90 days without a hazardous waste storage permit.

A generator of hazardous waste may accumulate waste on-site for 90 days or less without a permit if they meet these conditions:

First: the waste must be placed in containers (like drums or tanks) that are in good condition;

Second: incompatible wastes which might react dangerously with one another are not mixed;

Third: each container must have the date when accumulation began clearly marked on it;

Fourth: each container must be clearly labeled hazardous waste; and

Fifth: the facility must train its personnel and must maintain a contingency plan for operating in the event of an emergency.

Tanks which are part of a wastewater treatment system that is subject to regulation under the CWA need not have a RCRA permit so long as they are used for the treatment of

wastewater. Therefore, wastewater, which is being held temporarily in such tanks, is not subject to these RCRA permitting requirements.

If the Government proves beyond a reasonable doubt that a Defendant:

First: is a generator who knowingly stored hazardous waste without a permit for longer than 90 days; or

Second: knowingly failed to comply with any one of these conditions, then the storage at the facility is in violation of RCRA.

You are instructed that the following wastes are listed as hazardous wastes under the Resource Conservation and Recovery Act:

K106: Wastewater treatment sludge from the mercury cell process in chlorine production.

K071: Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.

U151: Mercury.

You are instructed that a solid waste, exhibits the characteristic of toxicity for mercury if, using the test methods set forth in the regulations, a representative sample of the waste contains mercury at a concentration of equal to or greater than 0.2 milligrams per liter.

Under the law, liquid wastes which are "corrosive" are identified as hazardous wastes. A liquid waste is considered to be corrosive if a representative sample of the waste is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5.

I instruct you that when a hazardous waste listed under the regulations is mixed with a solid waste, the resulting mixture

is a hazardous waste *if* the reason for the listing of the hazardous waste is that it is a toxic waste.

Each Defendant may be found guilty of Count 22 through 34 of the Indictment if you find that the Government has proven the following beyond a reasonable doubt:

First: that the Defendant under consideration had a responsible relationship to the violation—that is, that it occurred under his area of authority and supervisory responsibility;

Second: that the Defendant had the power or the capacity to prevent the violation; and

Third: that the Defendant acted knowingly in failing to prevent, detect or correct the violation.

Again, the Defendant, Alfred R. Taylor, is not charged with Count 33.

Comprehensive Environmental Response, Compensation, and Liability Act Charge

Counts 35 through 41 charge the Defendants, Christian A. Hansen and Alfred R. Taylor, with violations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which requires the immediate reporting of the release of a reportable quantity of a hazardous substance into the environment. Randall W. Hansen is not charged with these Counts. To establish a violation of this Act, as alleged in Counts 35 through 41, the Government must prove the following elements beyond a reasonable doubt as to each Defendant:

1. that the Defendant was one of the "persons in charge" of a facility;

2A. as to counts 35 to 40, that a reportable quantity of mercury contaminated wastewater; that is, more than one pound of wastewater contaminated with

mercury and other hazardous substances, was released into the environment within a 24 hour period;

2B. as to count 41, that a reportable quantity of chlorine; i.e., in excess of 10 pounds, was released into the environment within a 24 hour period; and

3. that the Defendant under consideration failed to notify immediately the National Response Center of the release as soon as he had knowledge of the release.

CERCLA's reporting requirements are not extended to all employees involved in a release. The reporting requirements of CERCLA apply to any person—even if of relatively low rank—who was in a position to detect, prevent, and abate a release of hazardous substances. The term "person-in-charge" is deliberately designed to cover supervisory personnel who have responsibility for a particular facility.

A "person in charge's" control over a facility need not be sole or exclusive. There may be several "persons in charge" of the same facility. It is only necessary that the individual have or share such control of the facility where the release occurred.

"Environment" means any land surface, subsurface layers, or surrounding air within the United States.

The term "facility" is defined to include:

A. Any building, structure, installation, equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or

B. any site or area where a hazardous substance has been deposited, stored, disposed of, or placed or otherwise come to be located.

The term "release" is defined to mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

Conclusion

I caution you, members of the jury, that you are here to determine from the evidence in this case whether each Defendant is guilty or not guilty. The Defendants are on trial only for the specific offenses alleged in the Indictment.

A separate crime or offense is charged against one or more of the Defendants in each count of the Indictment. Each charge, and the evidence pertaining to it, should be considered separately. Also, the case of each Defendant should be considered separately and individually. The fact that you may find any one or more of the Defendants guilty or not guilty of any of the offenses charged should not affect your verdict as to any other offense or any other Defendant.

Also, the question of punishment should never be considered by the jury in any way in deciding the case. If a Defendant is convicted, the matter of punishment is for the Judge alone to determine later.

Any verdict you reach in the jury room, whether guilty or not guilty, must be unanimous. In other words, to return a verdict, you must all agree. Your deliberations will be secret. You will never have to explain your verdict to anyone.

It is your duty as jurors to discuss the case with one another in an effort to reach agreement, if you can do so. Each of you must decide the case for yourself, but only after full consideration of the evidence with the other members of the jury. While you are discussing the case, do not hesitate to reexamine your own opinion and change your mind if you become convinced that you were wrong. But do not give up your honest beliefs solely because the others think differently or merely to get the case over.

Remember that, in a very real way, you are judges—judges of the facts. Your only interest is to seek the truth from the evidence in the case.

When you go to the jury room, you should first select one of your members to act as your foreperson. The foreperson will preside over your deliberations and will speak for you here in court.

A form of verdict has been prepared for your convenience.

[EXPLAIN VERDICT FORM]

You will take the verdict form to the jury room and, when you have reached unanimous agreement, you will have your foreperson fill in the verdict form, date and sign it, and then return to the courtroom.

If you should desire to communicate with me at any time, please write down your message or question and pass the note to the marshal, who will bring it to my attention. I will then respond as promptly as possible, either in writing or by having you returned to the courtroom so that I can address you orally. I caution you, however, with regard to any message or question you might send, that you should not tell me your numerical division at the time.

APPENDIX F

IN THE UNITED STATES DISTRICT COURT FOR THE
SOUTHERN DISTRICT OF GEORGIA
BRUNSWICK DIVISION

[Filed Jan. 6, 1999]

CR 298-23

UNITED STATES OF AMERICA

v.

CHRISTIAN A. HANSEN
RANDALL W. HANSEN
ALFRED R. TAYLOR
D. BRENT HANSON

GOVERNMENT'S AMENDED REQUEST TO CHARGE

Now comes the United States of America, by and through Harry D. Dixon, Jr., United States Attorney for the Southern District of Georgia, and requests the Court charge the jury on the following subjects, * * * [Page 56:]

Intent—Responsible Individual Instruction—(RCRA)

GOVERNMENT'S REQUESTED INSTRUCTION NO. ____
INSTRUCTION NO. ____

As a manager of the Brunswick LCP facility, the defendants may be found guilty of Count 22 through 34 of the Indictment if you find that the government has proven each of the following beyond a reasonable doubt:

> *First*, that the defendant has a responsible relationship to the violation—that is, that it occurred under his area of authority and supervisory responsibility;

Second, that the defendant had the power or the capacity to prevent the violation; and

Third, that the defendant acted knowingly in failing to prevent, detect or correct the violation.

United States v. Park, 421 U.S. 658, 672 (1975); *United States v. Dotterweich*, 320 U.S. 277, 284-85 (1943); *United States v. Cattle King Packing Co.*, 793 F.2d 232, 240-41 (10th Cir.), *cert. denied*, 107 S. Ct. 573 (1986); *United States v. Frezzo Brothers, Inc.*, 602 F.2d 1123, 1130 n.11 (3d Cir. 1979), *cert. denied*, 444 U.S. 1074 (1980); Given in *United States v. Dee*, 912 F.2d 741 (D. Maryland), 912 F.2d 741 (4th Cir. 1990).